

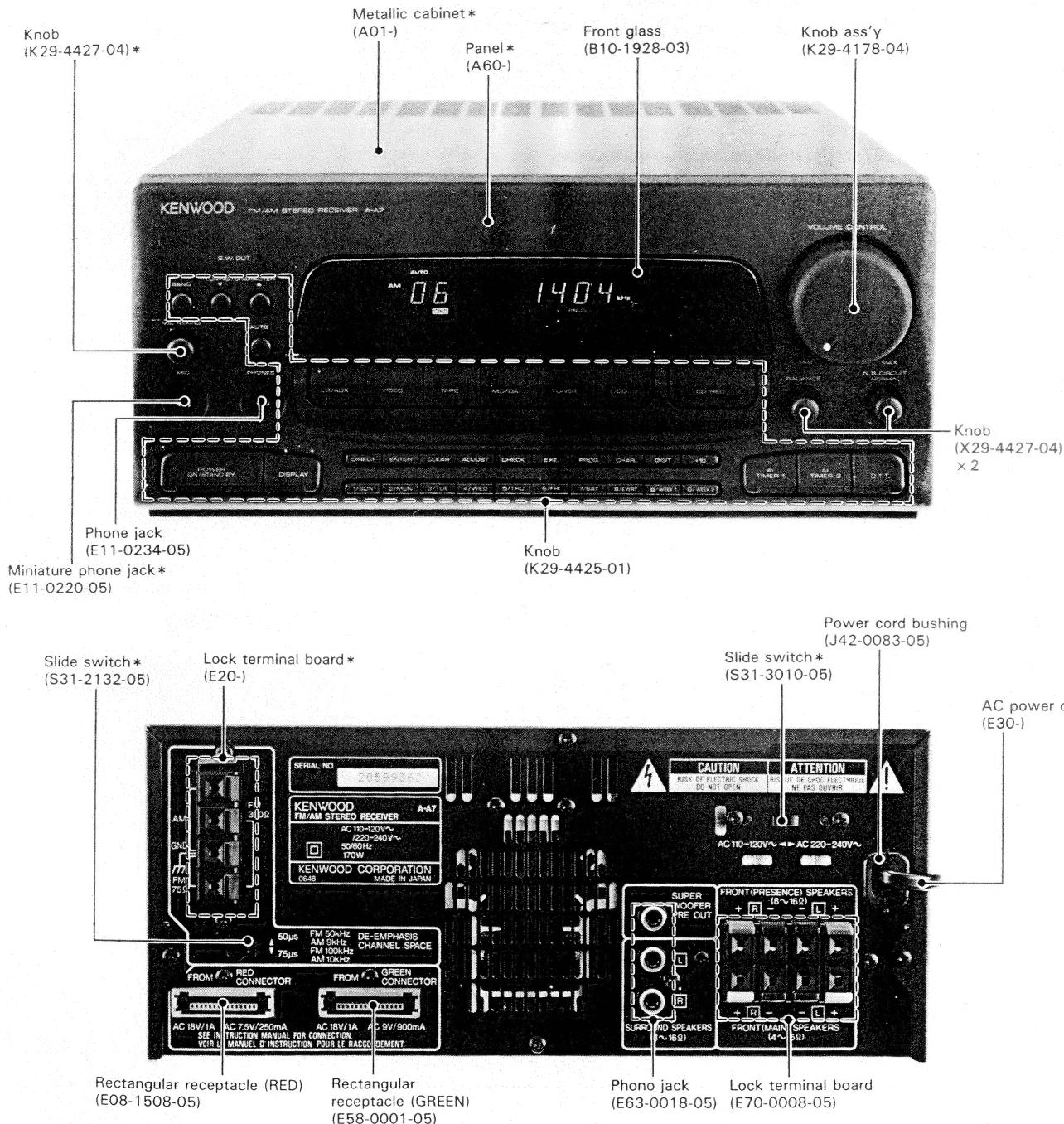
# A-A7/A7L

## SERVICE MANUAL

(COMPACT HIFI SYSTEM  
UD COMPONENT SYSTEM **UD-700/700M**)

# KENWOOD

©1992-7 PRINTED IN JAPAN  
B51-4592-00(MC) 4101



[ A-A7 : K, P, M, X type  
A-A7L: T, E type ]

\* Refer to parts list on page 40.  
Photo is A-A7.

Refer to the SERVICING NOTES on page 2 before repair.



PRODUCT-P.	MODEL NAME	DESTINATION		UNIT NAME	D213	D214	D215	A
		COUNTRY	ABB					
JAPAN MADE	A-A7	U.S.A	K P	X14-3620-11	NO	NO	NO	NO
		CANADA						
	A-A7L	GENERAL MARKET	M	X14-3620-21	NO	YES	NO	YES
		AUSTRALIA	X	X14-3620-71	YES	YES	NO	NO
SINGAPORE MADE	A-A7	EUROPE	T E	X14-3622-71	YES	YES	YES	NO
		ENGLAND						
	A-A7L	U.S.A	K P	X14-3640-10	NO	NO	NO	NO
		CANADA						

C201 : CXP50116-397Q  
or CXP50116-397QA

C202 : CX-7991

C201,202 : 2SC4038(Q,R)

C203 : 2SA1561(Q,R)

C201.202 : B30-1291-05

211-227,231-234

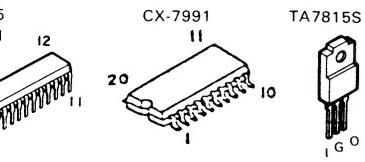
: HSS104  
or 1SS133  
or 1N4148

: W02-1046-05

D201 : FIP11AM7R

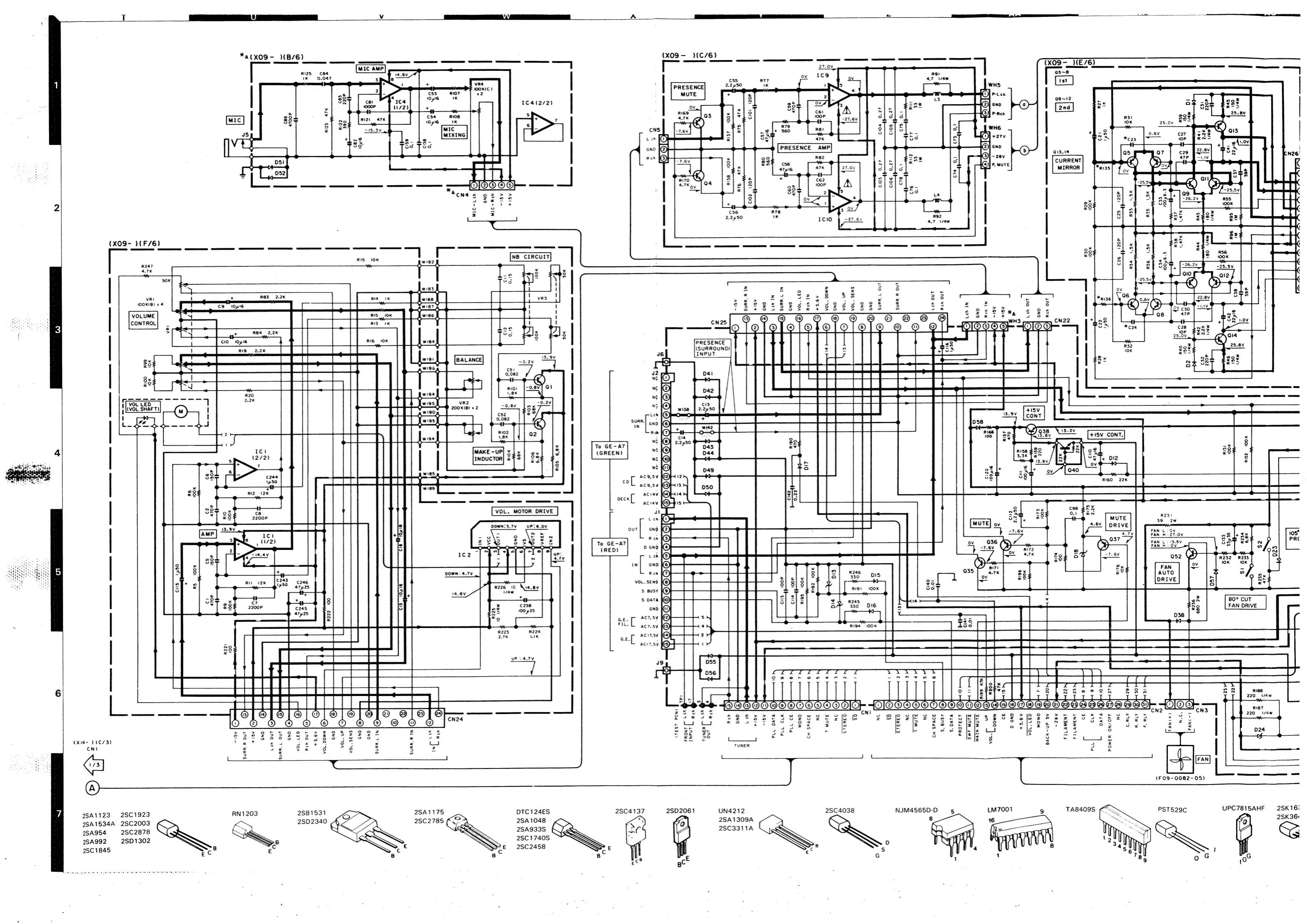
**CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.**

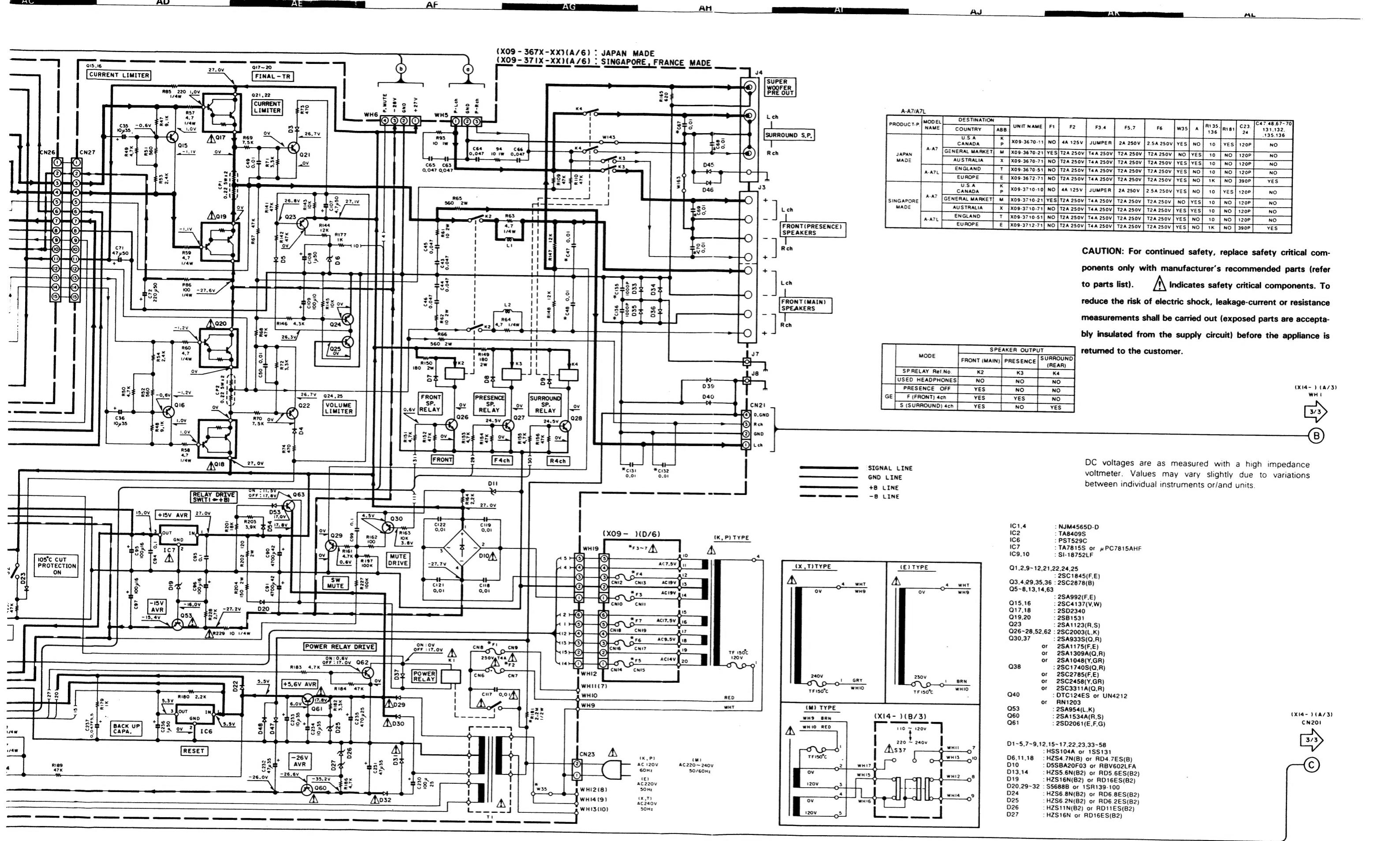
DC voltages are to be measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or in units.



Y05-2660-11

**A-A7/A7L**  
**KENWOOD**





A-A7 (K) (2/3)

Y05-2660-11

**A-A7/A7L**  
KENWOOD

DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

IC1.4 : NJM4565D-D  
IC2 : TA8409S  
IC6 : PST529C  
IC7 : TA7815S or  $\mu$ PC7815AHF  
IC9,10 : SI-16752LF

Q1,2,9-12,21,22,24,25 : 2SC1845(F,E)  
Q3,4,29,35,36 : 2SC2878(B)

Q5-8,13,14,63 : 2SA992(F,E)

Q15,16 : 2SC4137(V,W)

Q17,18 : 2SD2400

Q19,20 : 2SB1531

Q23 : 2SA1123(R,S)

Q26-28,52,62 : 2SC2003(L,K)

Q30,37 : 2SA933S(O,R)

or 2SA1175(F,E)

or 2SA1309A(Q,R)

or 2SA1048(Y,GR)

Q38 : 2SC1740S(Q,R)

or 2SC2785(F,E)

or 2SC2458(Y,GR)

or 2SC3311A(Q,R)

Q40 : DTC124ES or UN4212

or RN1203

Q53 : 2SA954(L,K)

Q60 : 2SA1534A(R,S)

Q61 : 2SD2061(E,F,G)

D1-5,7-9,12,15-17,22,23,33-58 : HSS104A or ISS131

D6,11,18 : HZ54.7N(B) or RD4.7ES(B)

D10 : DSSBA20F03 or RBV602LFA

D13,14 : HZ55.6N(B) or RD5.6ES(B)

D19 : HZ516N(B) or RD16ES(B)

D20,29-32 : S5688B or ISR139-100

D24 : HZ56.8N(B) or RD6.8ES(B)

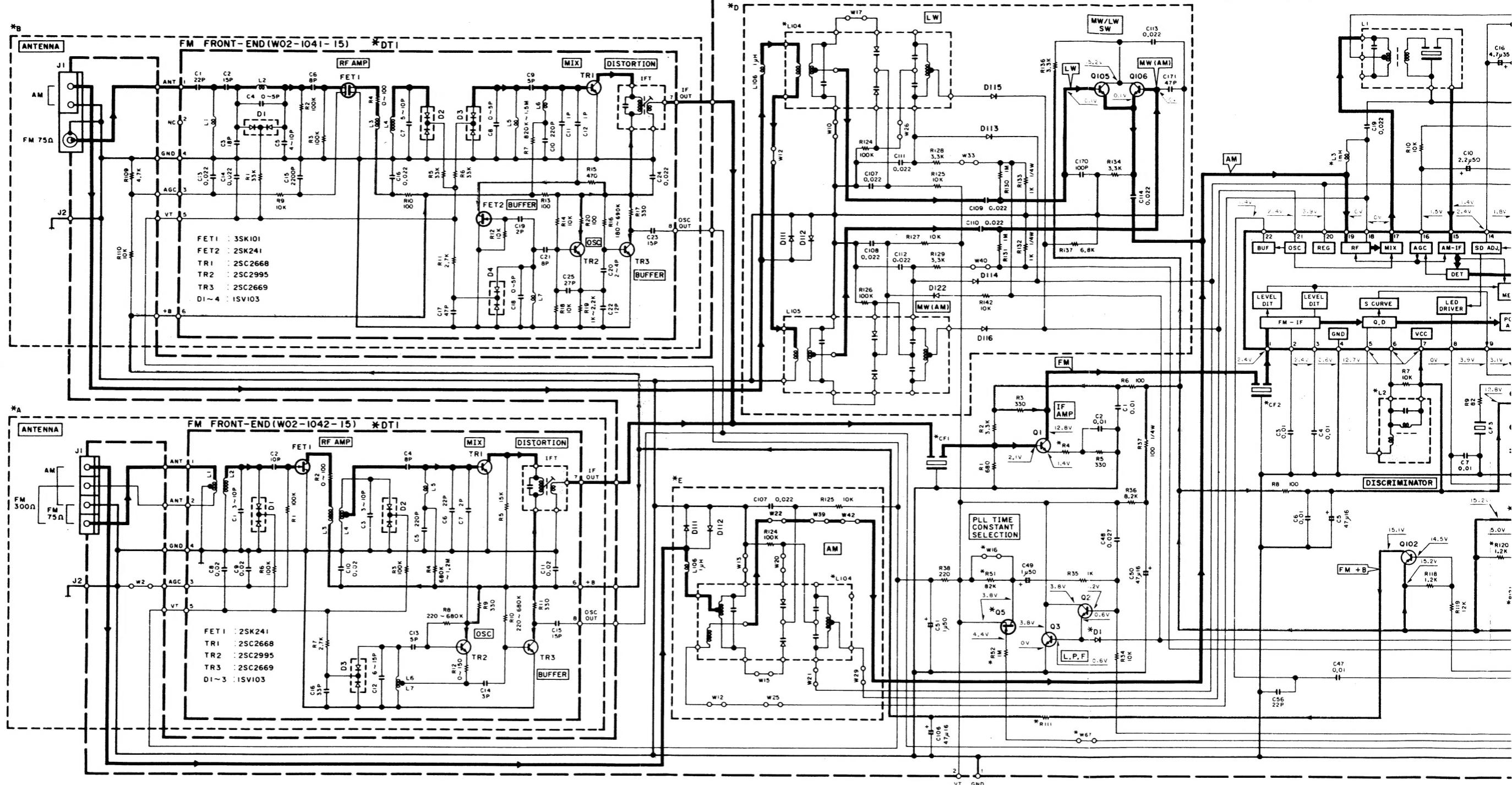
D25 : HZ56.2N(B) or RD6.2ES(B)

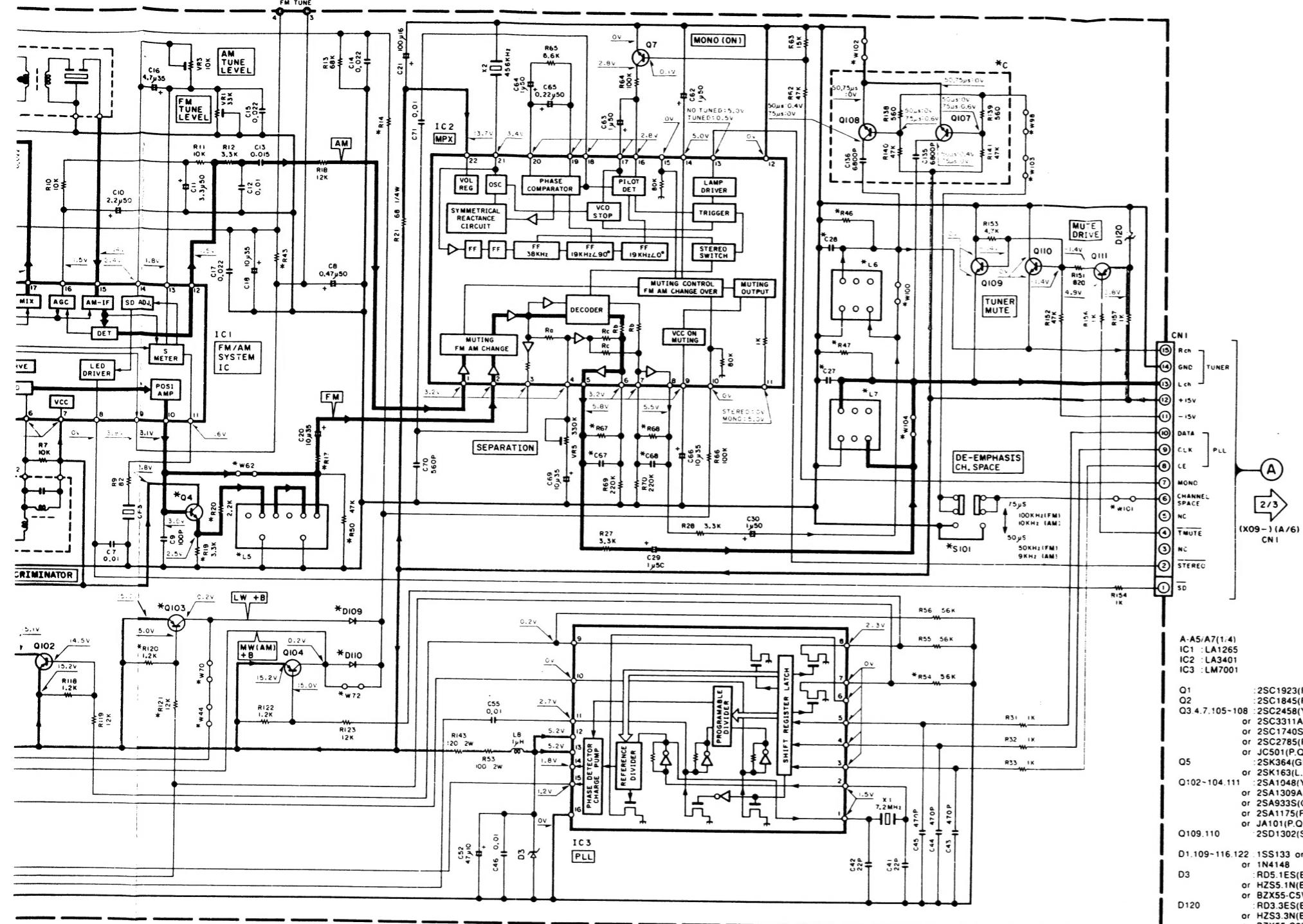
D26 : HZ511N(B) or RD11ES(B)

D27 : HZ516N or RD16ES(B)

(X14- ) (A/3)  
WH1  
3/3  
B

(X14- ) (A/3)  
CN201  
3/3  
C





A-A5/A7(1,4)  
 IC1 : LA1265  
 IC2 : LA3401  
 IC3 : LM7001

Q1 : 2SC1923(R.O)  
 Q2 : 2SC1845(F.E)  
 Q3 : 4.7.105-108 2SC2458(Y.GR)  
 or 2SC3311(O.R)  
 or 2SC17405(O.R)  
 or 2SC2785(F.E)  
 or JC501(P.O)

Q5 : 2SK364(GR.BL)  
 or 2SK163(L.M)  
 Q102-104.111 2SA1048(Y.GR)  
 or 2SA1309A(O.R)  
 or 2SA933S(Q.R)  
 or 2SA1175(F.E)  
 or JA101(P.O)

Q109.110 2SD1302(S.T)

D1.109-116.122 1SS133 or HSS104  
 or 1N4148  
 RD5.1ES(B2)

or HZ55.1N(B2)

or BZX55-C5V1

RD3.3ES(B2)

or HZ53.3N(B2)

or BZX55-C3V3

SIGNAL LINE

GND LINE

+B LINE

A-A7/A7L(K)(1/3)

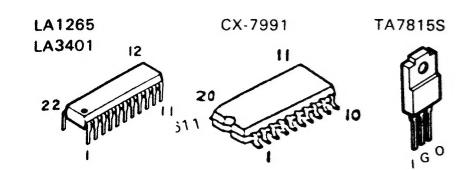
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Y05-2660-11

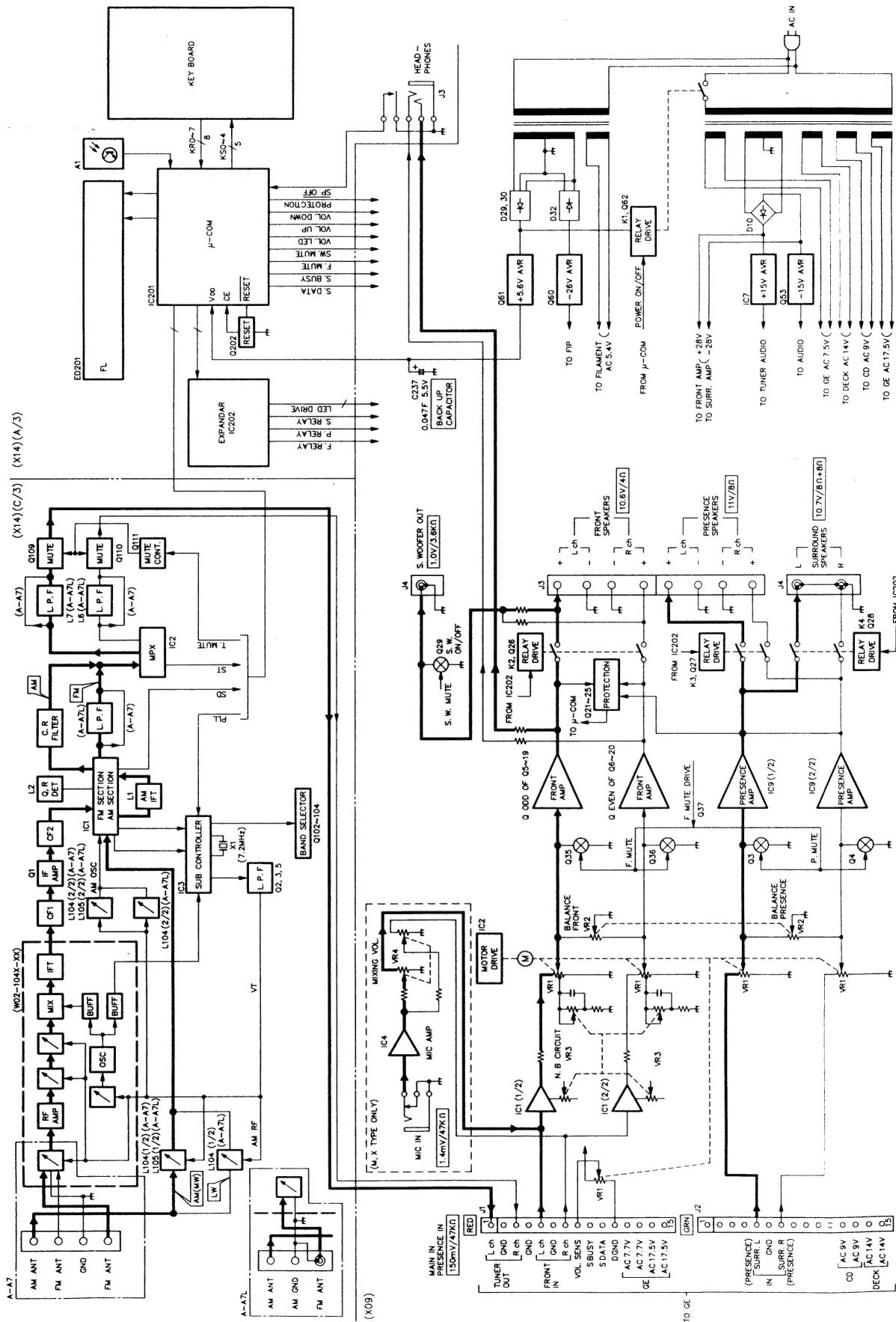
**A-A7/A7L**  
**KENWOOD**

NO	L2 (L39-1)	L35-7 (L39-1)	L104 (L39-1)	W16.22.62 72.100.104	W44 67.70	W98 101-103
NO	0435	NO	0189	YES	NO	NO
ES	0494	NO	0189	YES	NO	YES
NO	0494	NO	0189	YES	NO	NO
NO	0494	YES	0195	NO	YES	NO
NO	0439	NO	0189	YES	NO	NO
ES	0494	NO	0189	YES	NO	YES
NO	0494	NO	0189	YES	NO	NO
NO	0494	YES	0195	NO	YES	NO



A-A7/A7L

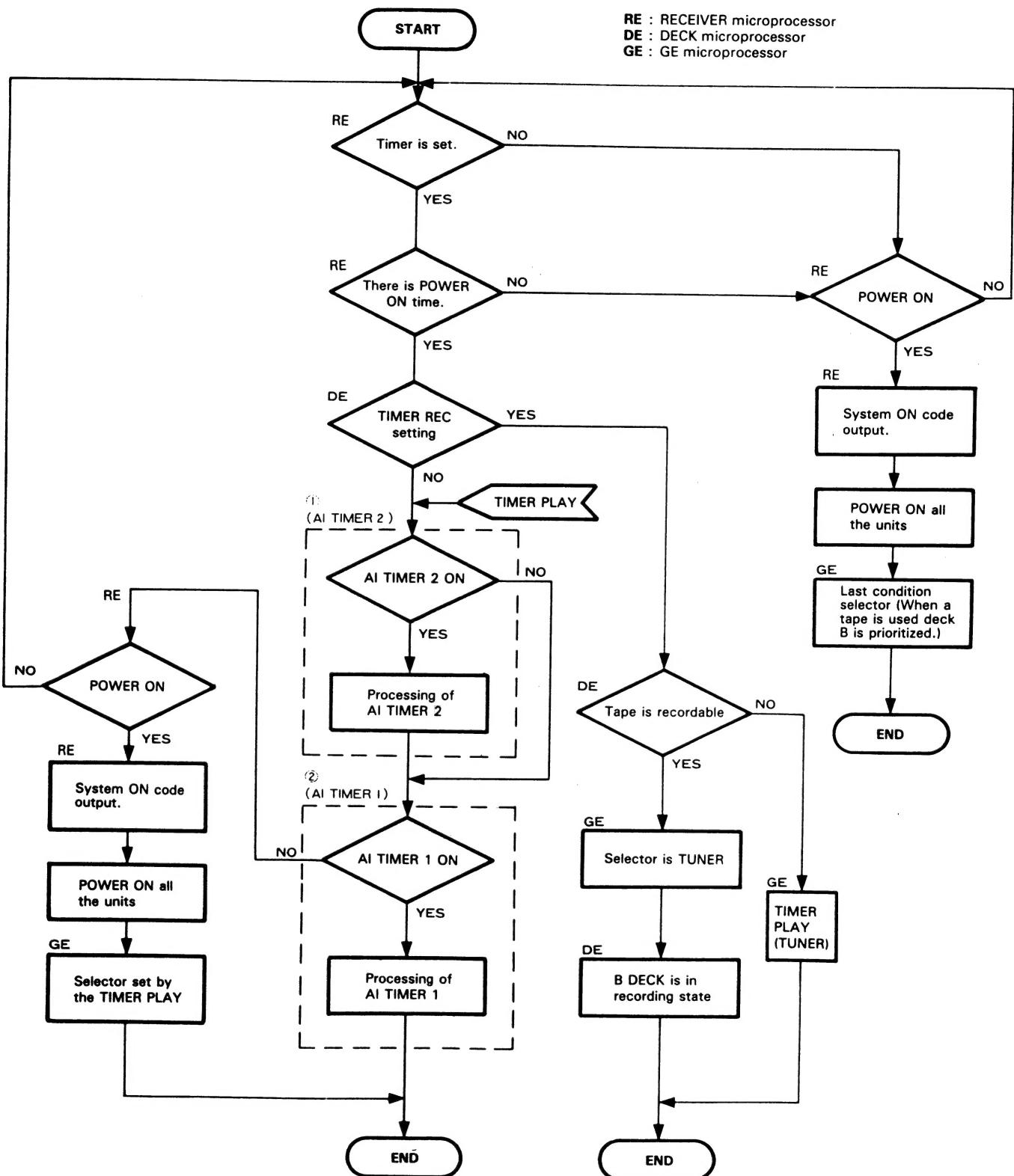
## BLOCK DIAGRAM



## CIRCUIT DESCRIPTION

## 3. Operation of UD-700/700M

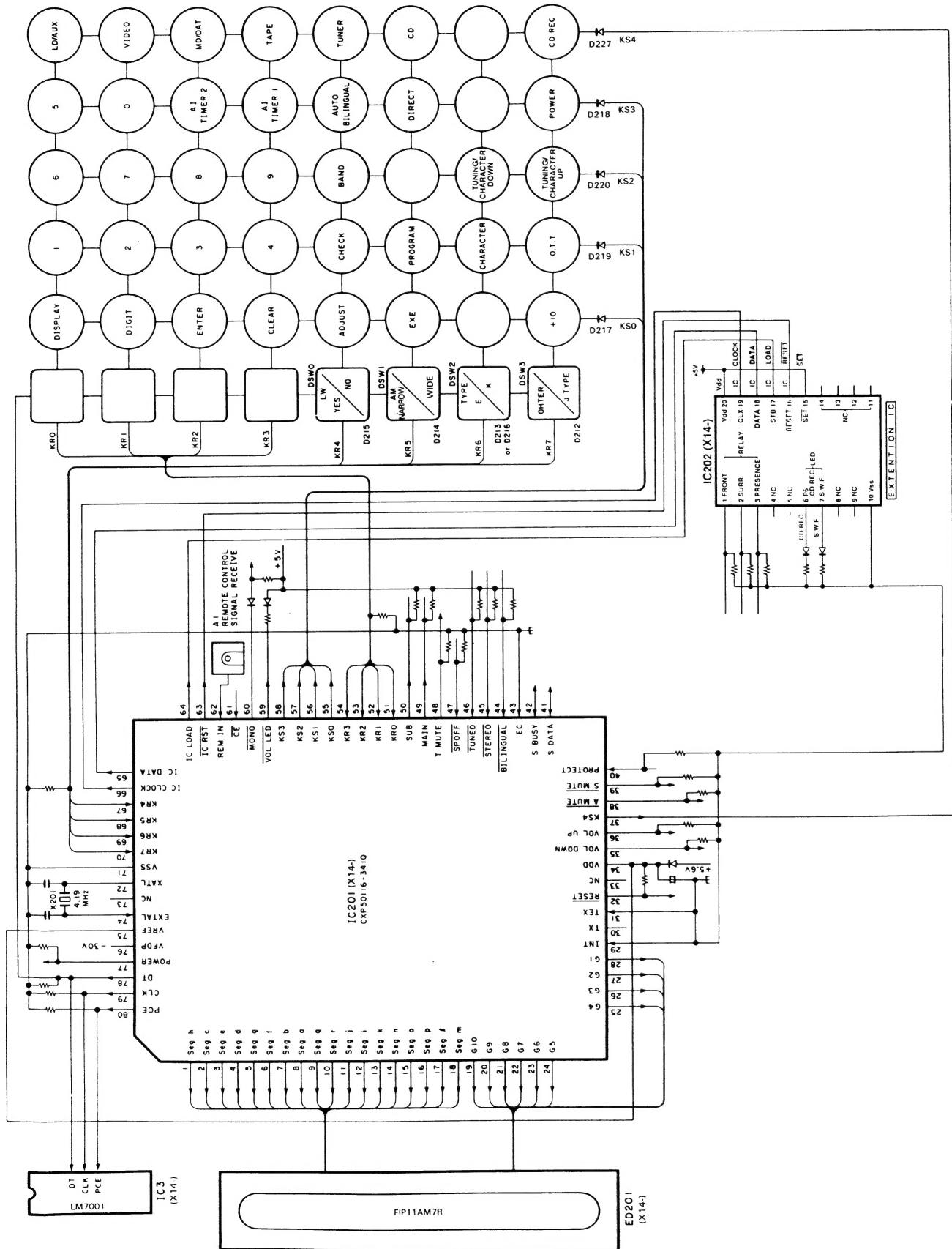
The flow chart from power on through sound generation



# A-A7/A7L

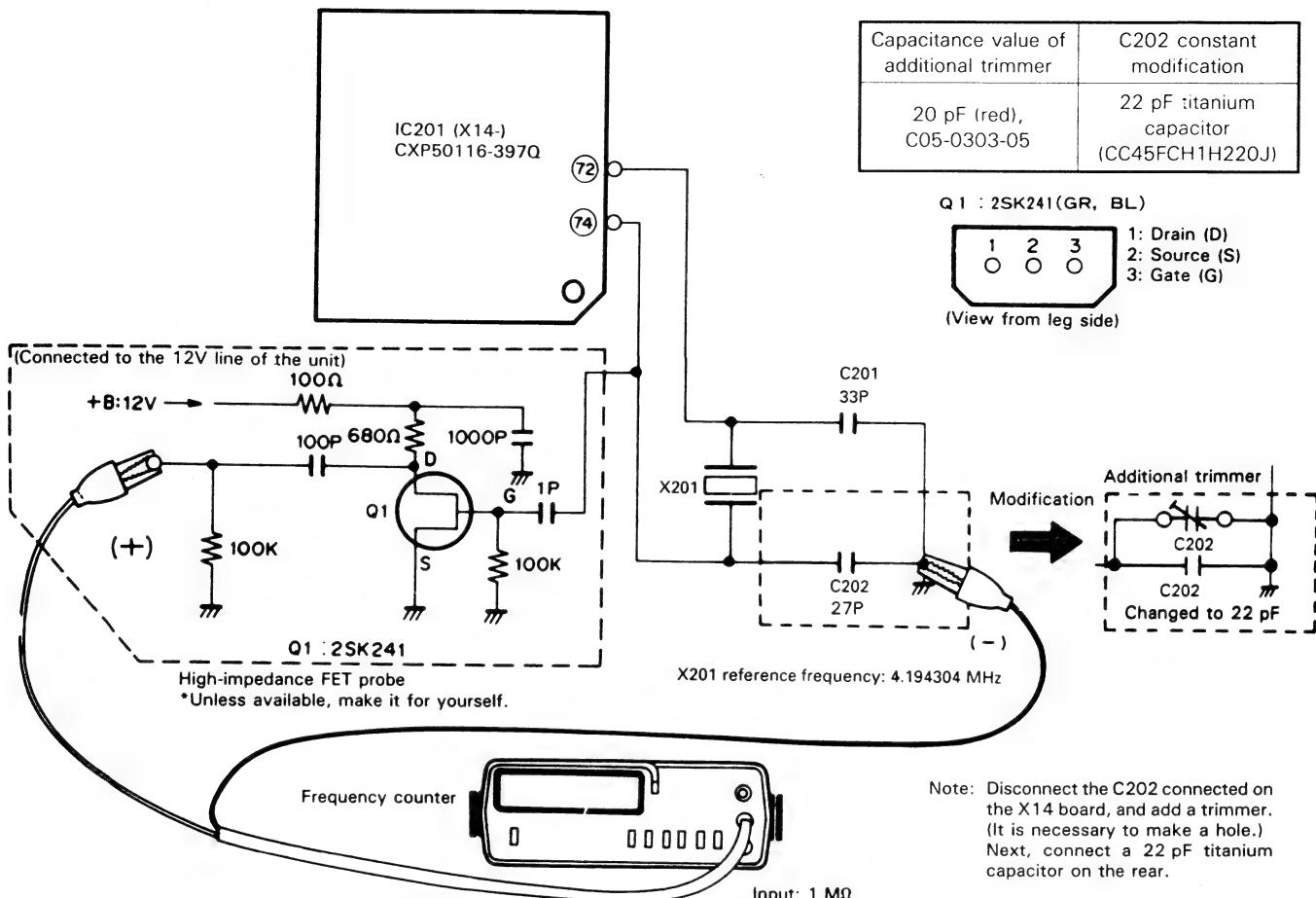
## CIRCUIT DESCRIPTION

### 6. Block diagram of surrounding microprocessor



## ADJUSTMENT

## 2. Timer accuracy improvement method



**The timer accuracy is within  $\pm 40$  seconds for one month as a standard. For improved timer accuracy, perform the following procedure:**

- (1) If the timer accuracy is without the standard, replace X201 (L77-1176-05) near the microprocessor IC on a printed board (X14-).
- (2) Even if within the standard, for further improved accuracy, change the constant of C202 in the crystal oscillation circuit of microprocessor IC201 and add a trimmer.

**Adjustment method** (Use a high-impedance buffer to avoid frequency deviation.)

Connect a high-accuracy frequency counter to pin 74 by way of the FET probe shown above, and adjust the frequency fully up to the first digit of the X201 reference frequency 4,194,304 Hz. (Connect the negative (-) side of the frequency counter to the GND side of C202.)

Note (a) As regards the positive (+) side of the frequency counter, arrange as short a distance as possible between pin 74 of IC201 and 1P of the input stage of the FET probe.

Note: Disconnect the C202 connected on the X14 board, and add a trimmer. (It is necessary to make a hole.) Next, connect a 22 pF titanium capacitor on the rear.

Note (b) Perform the trimmer adjustment after energization of around 10 minutes at normal temperature.

(3) Monthly error calculation method

For example, when the result of measurement at pin 74 by the frequency counter is  $f_x = 4,194,275$  Hz... (Reference frequency  $f_0 = 4,194,304$  [Hz])

$$\text{Monthly error [sec]} = \frac{f_x - f_0}{f_0} \times \text{the number of seconds}$$

taken for one month

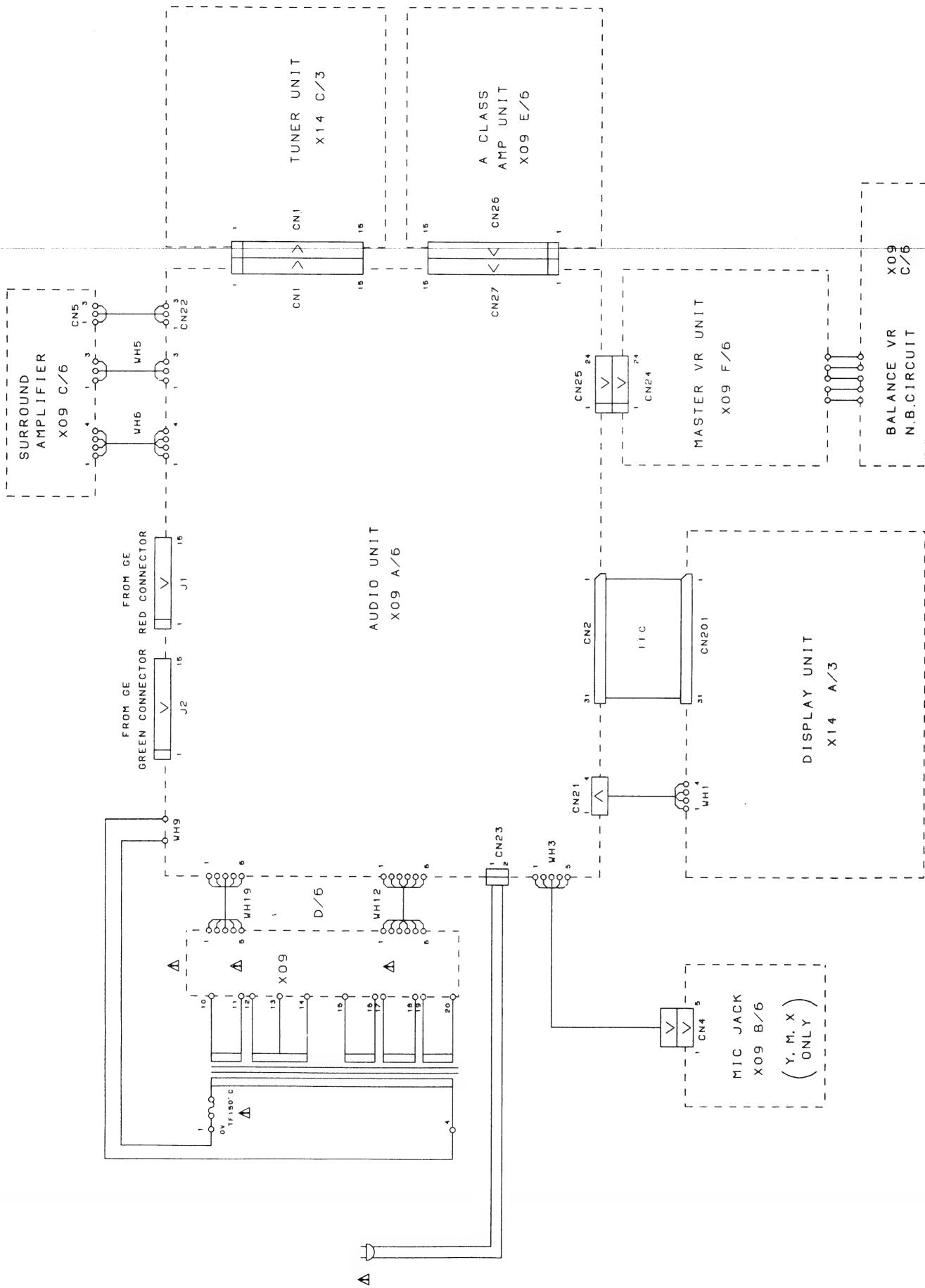
$$= \frac{4,194,275 - 4,194,304}{4,194,304} \times (60 \times 60 \times 24 \times 30)$$

$$= -17.9 \text{ [sec]}$$

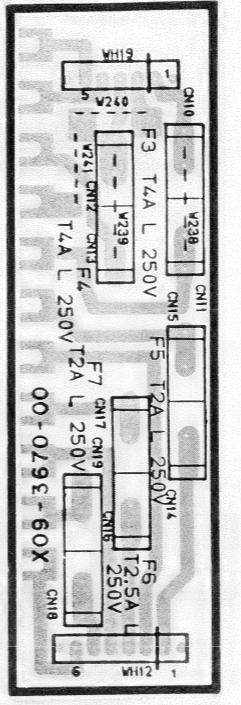
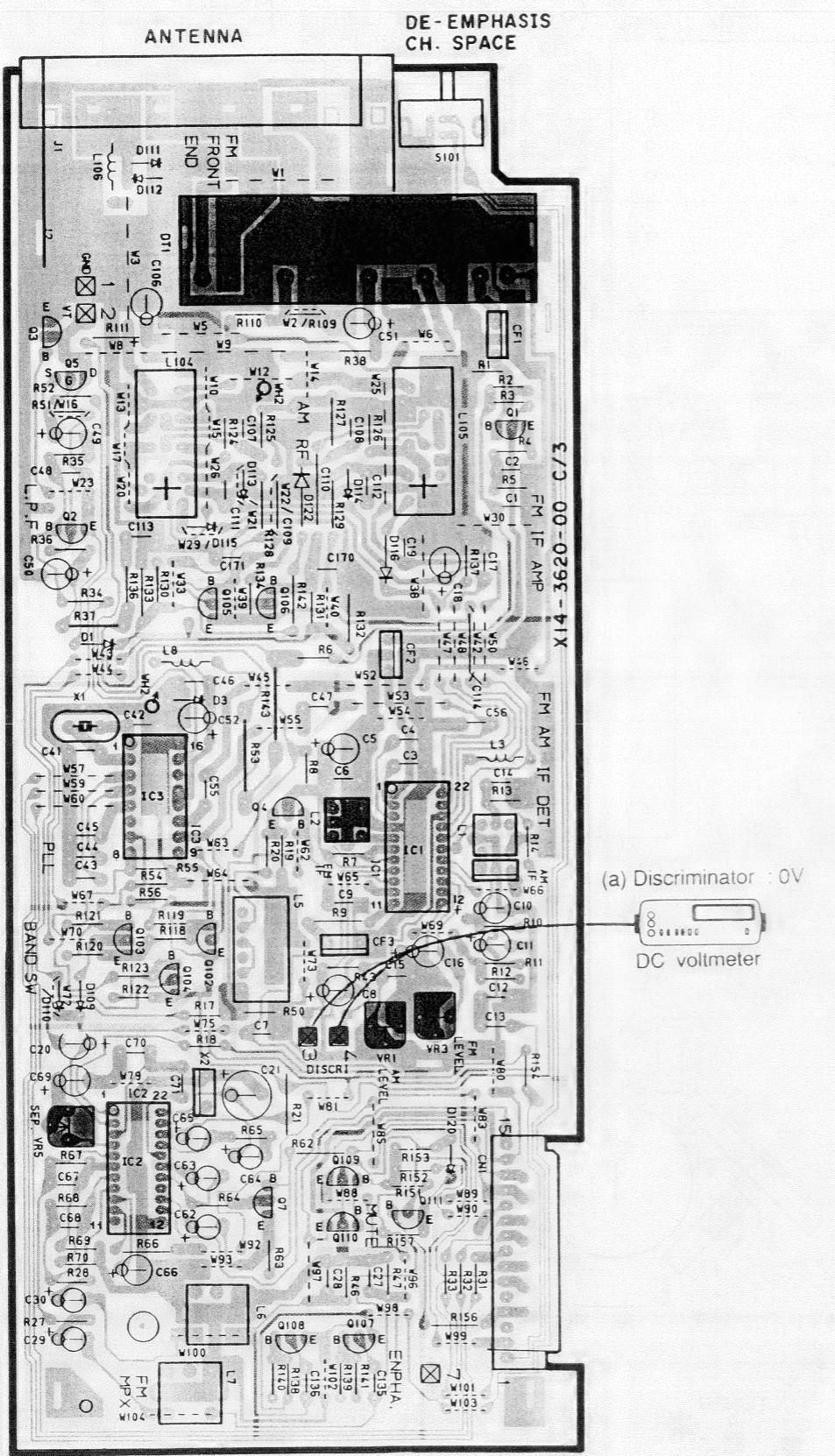
\* A minus value as the monthly error means a loss.

# A-A7/A7L

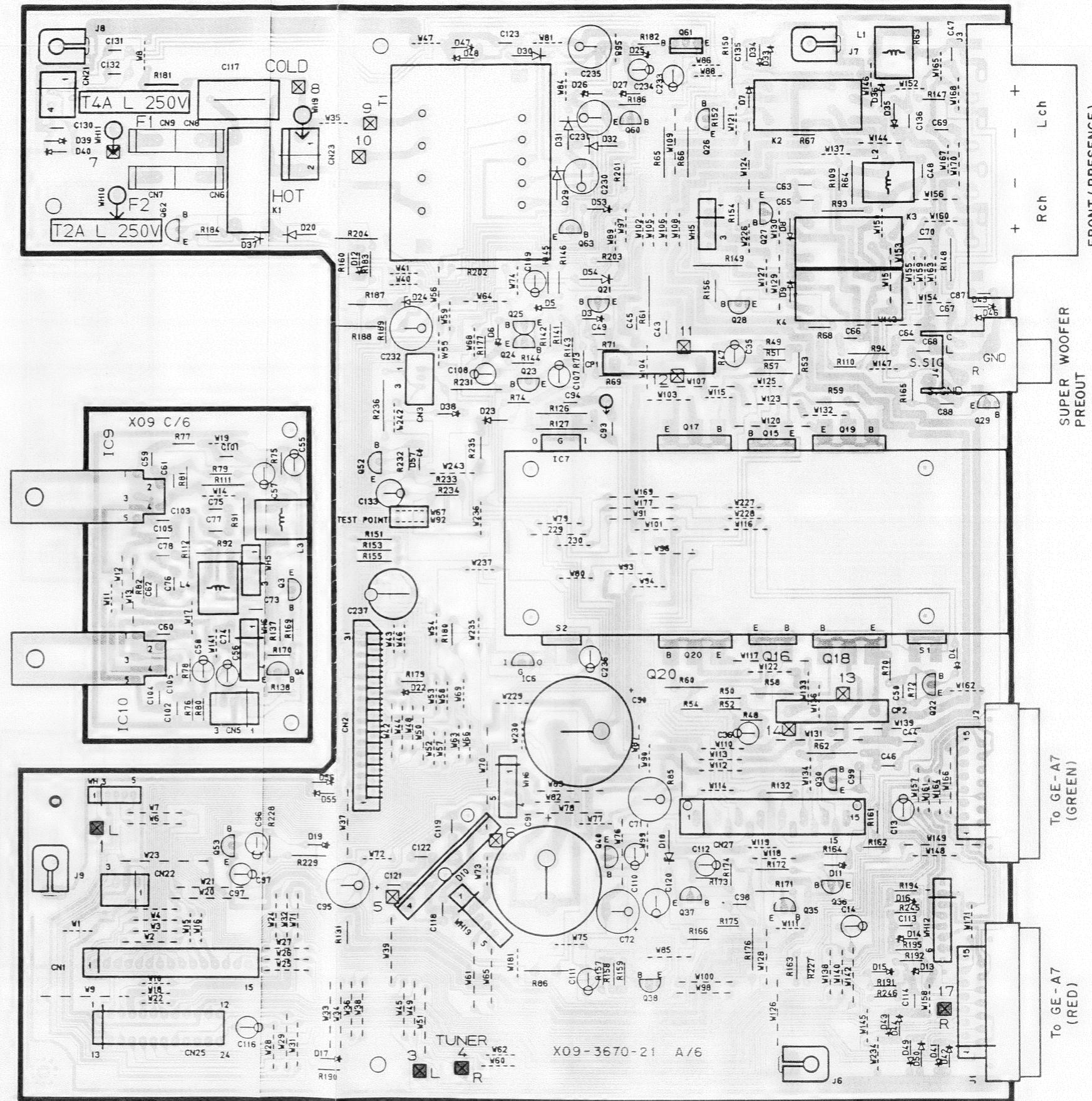
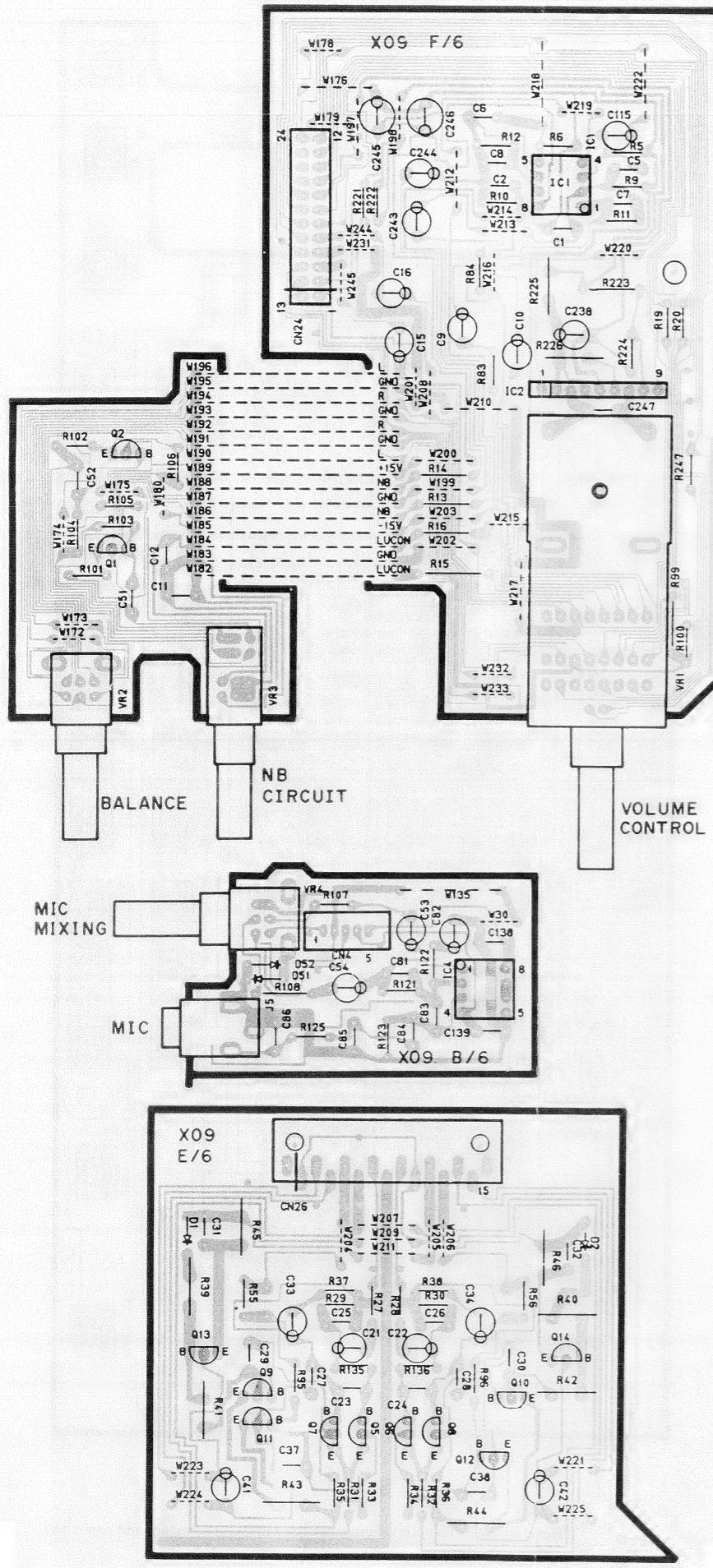
## WIRING DIAGRAM



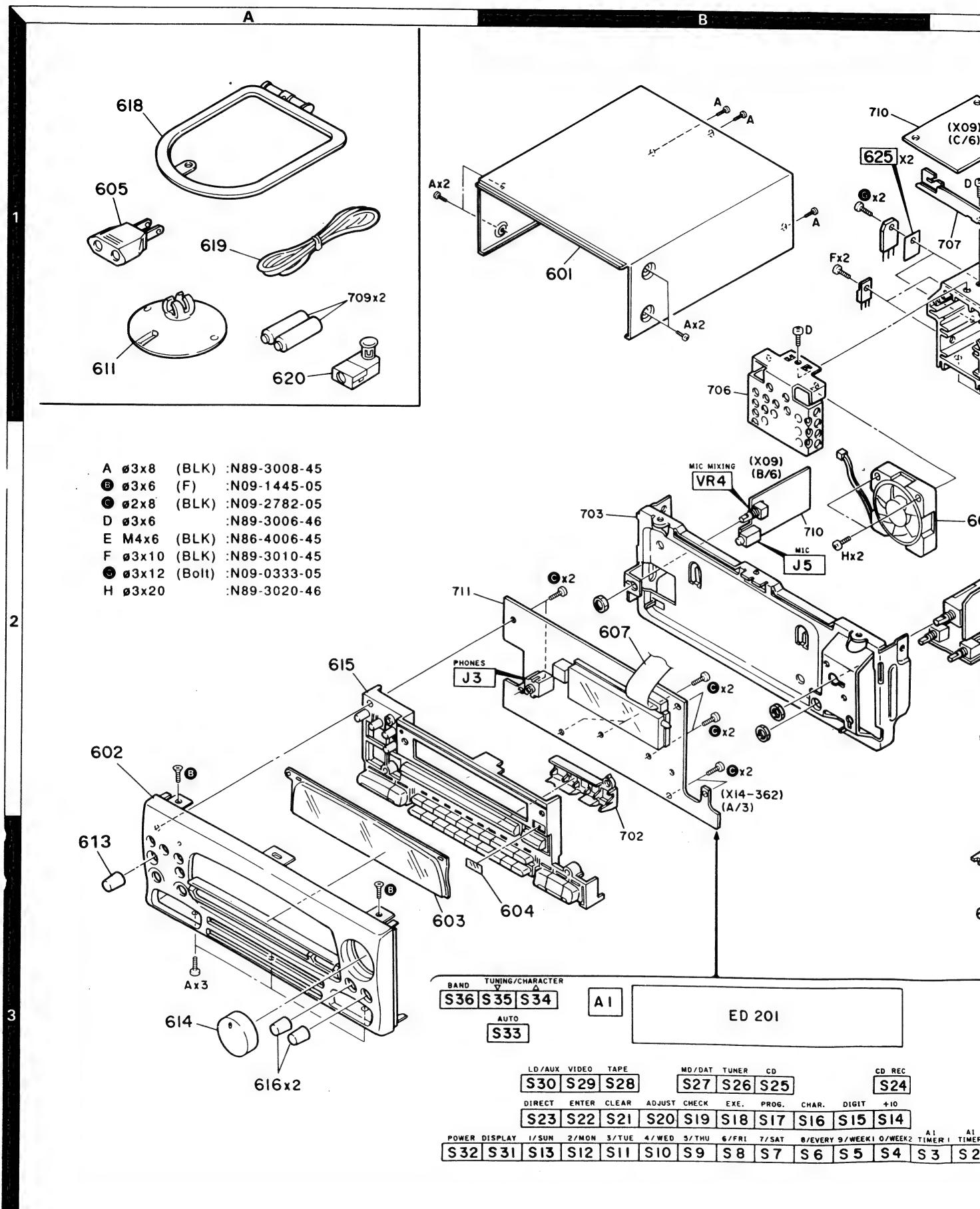
# PC BOARD (Component side view)

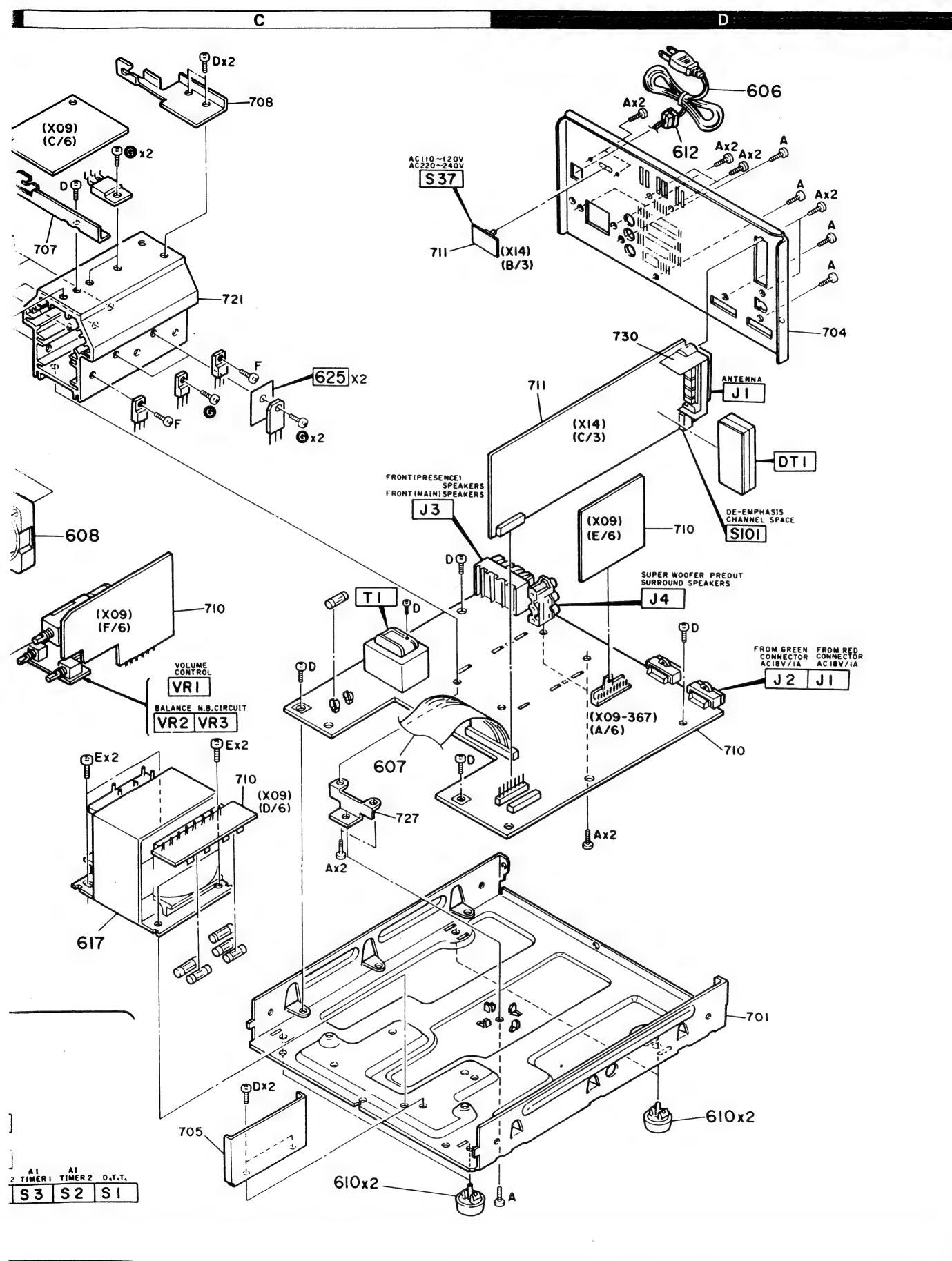


## PC BOARD (Component side view)



Refer to the schematic diagram for the values of registers and capacitors.





Parts with the exploded numbers larger than 700 are not supplied.

A1 2	TIMER1	A1 2	TIMER2	D.T.T.
S3	S2	S1		

## PARTS LIST

x New Parts

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Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Desti- nation 仕 向	Re- marks 備考
<b>A-A7/A7L (JAPAN MADE)</b>						
601	1B	*	A01-2956-01	METALLIC CABINET		
602	2A	*	A60-0254-01	PANEL(A-A7)	MX	
602	2A	*	A60-0255-01	PANEL(A-A7)	KP	
602	2A	*	A60-0256-01	PANEL(A-A7L)	TE	
603	3A	*	B10-1928-03	FRONT GLASS		
604	3B	*	B11-0259-04	SMOKED FILTER		
-			B46-0092-13	WARRANTY CARD	K	
-			B46-0096-33	WARRANTY CARD	X	
-			B46-0121-13	WARRANTY CARD	P	
-			B46-0122-23	WARRANTY CARD	E	
-			B46-0143-13	WARRANTY CARD	T	
-		*	B59-0177-00	SUB-INSTRUCTION MANUAL		
-		*	B60-0898-00	INSTRUCTION MANUAL(ENGLISH)	KPMX	
-		*	B60-0899-00	INSTRUCTION MANUAL(FRENCH)	PE	
-		*	B60-0900-00	INSTRUCTION MANUAL(GERMAN)	E	
-		*	B60-0901-00	INSTRUCTION MANUAL(DUTCH)	E	
-		*	B60-0902-00	INSTRUCTION MANUAL(ITALIAN)	E	
-		*	B60-0903-00	INSTRUCTION MANUAL(CHINESE)	M	
-		*	B60-0904-00	INSTRUCTION MANUAL(SPANISH)	ME	
-		*	B60-0986-00	INSTRUCTION MANUAL(ARABIC)	M	
△ 605	1A	E03-0115-05	AC PLUG ADAPTER		M	
△ 606	1D	E30-2592-15	AC POWER CORD		ME	
△ 606	1D	E30-2593-15	AC POWER CORD		T	
△ 606	1D	E30-2594-15	AC POWER CORD		X	
△ 606	1D	E30-2650-05	AC POWER CORD		KP	
607	2B, 2C	*	E35-0404-05	WIRING HARNESS		
608	2C	*	F09-0082-05	FAN		
-			H13-0039-04	CARTON BOARD		
-			H10-5300-12	POLYSTYRENE FOAMED FIXTURE(L)		
-			H10-5301-02	POLYSTYRENE FOAMED FIXTURE(R)		
-		*	H10-5391-03	POLYSTYRENE FOAMED FIXTURE(F)		
-			H25-0397-04	PROTECTION BAG	KPMXE	
-			H25-0632-24	PROTECTION BAG	KPMXE	
-			H25-0644-04	PROTECTION BAG (0632 PRINTED)	T	
-			H25-0659-04	PROTECTION BAG (0397 PRINTED)	T	
-		*	H50-0354-04	ITEM CARTON CASE(A-A7)	KPMX	
-		*	H50-0355-04	ITEM CARTON CASE(A-A7L)	TE	
610	3D	J02-0370-05	FOOT			
611	1A	J19-2815-04	ANTENNA HOLDER			
△ 612	1D	J42-0083-05	POWER CORD BUSHING			
-			J61-0307-05	WIRE BAND		
613	3A	*	K29-4427-04	KNOB (MIC)		
614	3A	K29-4178-04	KNOB ASSY(VOLUME CONTROL)			
615	2A	*	K29-4425-01	KNOB(POWER, DISPLAY etc.)		
616	3A	*	K29-4427-04	KNOB(BALANCE, N.B. CIRCUIT)		
△ 617	3C	*	L07-0541-15	POWER TRANSFORMER	KP	
△ 617	3C	*	L07-0542-15	POWER TRANSFORMER	M	
△ 617	3C	*	L07-0543-15	POWER TRANSFORMER	XT	
△ 617	3C	*	L07-0544-15	POWER TRANSFORMER	E	
A	1B		N89-3008-45	BINDING HEAD TAPPIE SCREW		

L:Scandinavia

K:USA

P:Canada

Y:PX(Far East, Hawaii)

T:England

E:Europe

Y:AAFES(Europe)

X:Australia

M:Other Areas

△ indicates safety critical components.

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B	3A		N09-1445-05	SET SCREW (M3X8)		
C	2B		N09-2782-05	TAPTITE SCREW (2.6X8)		
D	2B		N89-3006-46	BINDING HEAD TAPTITE SCREW		
E	2C		N86-4006-45	BINDING HEAD TAPTITE SCREW		
F	1C		N89-3010-45	BINDING HEAD TAPTITE SCREW		
G	1C		N09-0333-05	TAPPING SCREW (3X12)		
H	2B		N89-3020-46	BINDING HEAD TAPTITE SCREW		
618	1A		T90-0173-05	LOOP ANTENNA(AM)		
619	1A		T90-0176-05	T TYPE ANTENNA(FM)		
620	1A		T90-0185-05	ANTENNA ADAPTOR	TE	

## A-A7/A7L (SINGAPORE MADE)

601	1B	*	A01-2966-01	METALLIC CABINET		S
602	2A	*	A60-0254-01	PANEL(A-A7)	MX	
602	2A	*	A60-0255-01	PANEL(A-A7)	KP	
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603	3A	*	B10-1928-03	FRONT GLASS		
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-			B46-0121-13	WARRANTY CARD	P	
-			B46-0122-23	WARRANTY CARD	E	
-			B46-0143-13	WARRANTY CARD	T	
-		*	B59-0177-00	SUB-INSTRUCTION MANUAL	KPMX	
-		*	B60-0898-00	INSTRUCTION MANUAL(ENGLISH)		
-		*	B60-0899-00	INSTRUCTION MANUAL(FRENCH)	PE	
-		*	B60-0900-00	INSTRUCTION MANUAL(GERMAN)	E	
-		*	B60-0901-00	INSTRUCTION MANUAL(DUTCH)	E	
-		*	B60-0902-00	INSTRUCTION MANUAL(ITALIAN)	E	
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△ 606	1D		E30-2593-15	AC POWER CORD	T	
△ 606	1D		E30-2594-15	AC POWER CORD	X	
△ 606	1D		E30-2650-05	AC POWER CORD	KP	
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-		*	H10-5325-02	POLYSTYRENE FOAMED FIXTURE(R)		S
-		*	H10-5390-03	POLYSTYRENE FOAMED FIXTURE(F)		S
-		*	H13-0086-04	CARTON BOARD	KPMXE	
-		*	H25-0397-04	PROTECTION BAG		
-			H25-0632-24	PROTECTION BAG	KPMXE	
-			H25-0644-04	PROTECTION BAG (0632 PRINTED)	T	
-			H25-0659-04	PROTECTION BAG (0397 PRINTED)	T	
-		*	H50-0358-04	ITEM CARTON CASE(A-A7)	KPX	S
-		*	H50-0359-04	ITEM CARTON CASE(A-A7L)	M	S
-		*	H50-0417-14	ITEM CARTON CASE(A-A7L)	TE	S
610	3D		J02-0370-05	FOOT		

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K:USA

P:Canada

S: SINGAPORE MADE

Y:PX(Far East, Hawaii)

T:England

E:Europe

Y:AAFES(Europe)

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H	2B		N89-3020-46	BINDING HEAD TAPTITE SCREW		
618	1A		T90-0173-05	LOOP ANTENNA(AM)		
619	1A		T90-0176-05	T TYPE ANTENNA(FM)		
620	1A		T90-0185-05	ANTENNA ADAPTOR	TE	

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602	2A	*	A60-0256-01	PANEL(A-A7L)	TE	
603	3A	*	B10-1928-03	FRONT GLASS		
604	3B	*	B11-0259-04	SMOKED FILTER		
-			B46-0092-13	WARRANTY CARD	K	
-			B46-0096-33	WARRANTY CARD	X	
-			B46-0121-13	WARRANTY CARD	P	
-			B46-0122-23	WARRANTY CARD	E	
-			B46-0143-13	WARRANTY CARD	T	
-		*	B59-0177-00	SUB-INSTRUCTION MANUAL		
-		*	B60-0898-00	INSTRUCTION MANUAL(ENGLISH)	KPMX	
-		*	B60-0899-00	INSTRUCTION MANUAL(FRENCH)	PE	
-		*	B60-0900-00	INSTRUCTION MANUAL(GERMAN)	E	
-		*	B60-0901-00	INSTRUCTION MANUAL(DUTCH)	E	
-		*	B60-0902-00	INSTRUCTION MANUAL(ITALIAN)	E	
-		*	B60-0903-00	INSTRUCTION MANUAL(CHINESE)	ME	
-		*	B60-0904-00	INSTRUCTION MANUAL(SPANISH)	M	
-		*	B60-0986-00	INSTRUCTION MANUAL(ARABIC)	M	
△ 605	1A		E03-0115-05	AC PLUG ADAPTER	M	
△ 606	1D		E30-2592-15	AC POWER CORD	ME	
△ 606	1D		E30-2593-15	AC POWER CORD	T	
△ 606	1D		E30-2594-15	AC POWER CORD	X	
△ 606	1D		E30-2650-05	AC POWER CORD	KP	
607	2B, 2C	*	E35-0404-05	WIRING HARNESS		
608	2C	*	F09-0082-05	FAN		
-		*	H10-5324-02	POLYSTYRENE FOAMED FIXTURE(L)		
-		*	H10-5325-02	POLYSTYRENE FOAMED FIXTURE(R)	S	
-		*	H10-5390-03	POLYSTYRENE FOAMED FIXTURE(F)	S	
-			H13-0086-04	CARTON BOARD		
-			H25-0397-04	PROTECTION BAG	KPMXE	
-			H25-0632-24	PROTECTION BAG	KPMXE	
-			H25-0644-04	PROTECTION BAG (0632 PRINTED)	T	
-			H25-0659-04	PROTECTION BAG (0397 PRINTED)	T	
-		*	H50-0358-04	ITEM CARTON CASE(A-A7)	KPX	S
-		*	H50-0359-04	ITEM CARTON CASE(A-A7)	M	S
-		*	H50-0417-14	ITEM CARTON CASE(A-A7L)	TE	S
610	3D		J02-0370-05	FOOT		

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611	1A		J19-2815-04	ANTENNA HOLDER		
612	1D		J42-0083-05	POWER CORD BUSHING		
			J61-0307-05	WIRE BAND		
613	3A	*	K29-4427-04	KNOB (MIC)	MX	
614	3A		K29-4178-04	KNOB ASSY(VOLUME CONTROL)		
615	2A	*	K29-4425-01	KNOB(POWER, DISPLAY etc.)		
616	3A	*	K29-4427-04	KNOB(BALANCE, N.B. CIRCUIT)		
617	3C	*	L07-0541-15	POWER TRANSFORMER	KP	
617	3C	*	L07-0542-15	POWER TRANSFORMER	M	
617	3C	*	L07-0543-15	POWER TRANSFORMER	XT	
617	3C	*	L07-0544-15	POWER TRANSFORMER	E	
A	1B		N89-3008-45	BINDING HEAD TAPTITE SCREW		
B	3A		N09-1445-05	SET SCREW (M3X8)		
C	2B		N09-2782-05	TAPTITE SCREW (2.6X8)		
D	2B		N89-3006-46	BINDING HEAD TAPTITE SCREW		
E	2C		N86-4006-45	BINDING HEAD TAPTITE SCREW		
F	1C		N89-3010-45	BINDING HEAD TAPTITE SCREW		
G	1C		N09-0333-05	TAPPING SCREW (3X12)		
H	2B		N89-3020-46	BINDING HEAD TAPTITE SCREW		
618	1A		T90-0174-05	LOOP ANTENNA(AM)	S	
619	1A		T90-0175-05	T TYPE ANTENNA(FM)		
620	1A		T90-0185-05	ANTENNA ADAPTER	TE	

## AUDIO UNIT X09-367: JAPAN MADE X09-371: SINGAPORE MADE

C1 ,2		CK45FB1H471K	CERAMIC	470PF	K		
C5 ,6		CC45FSL1H151J	CERAMIC	150PF	J		
C7 ,8		CF92FV1H222J	MF	2200PF	J		
C9 ,10		C90-3225-05	ELECTRO	10UF	16WV		
C11 ,12		CF92FV1H154J	MF	0.15UF	J		
C13 ,14		CE04KW1H2R2M	ELECTRO	2.2UF	50WV		
C15 ,16		C90-3225-05	ELECTRO	10UF	16WV		
C21 ,22		CE04KW1H010M	ELECTRO	1.0UF	50WV		
C23 ,24		CC45FSL1H121J	CERAMIC	120PF	J	KPMXT	
C23 ,24		CC45FSL1H391J	CERAMIC	390PF	J	E	
C25 ,26		CC45FSL1H121J	CERAMIC	120PF	J		
C27 ,28		CC45FSL1H100D	CERAMIC	10PF	D		
C29 ,30		CC45FSL1H470J	CERAMIC	47PF	J		
C31 ,32		CC45FSL1H221J	CERAMIC	220PF	J		
C33 ,34		C90-1845-05	ELECTRO	100UF	6.3WV		
C35 ,36		CE04KW1V100M	ELECTRO	10UF	35WV		
C37 ,38		CC45FSL1H390J	CERAMIC	39PF	J		
C41 ,42		CE04KW1C220M	ELECTRO	22UF	16WV		
C43 -46		CF92FV1H473J	MF	0.047UF	J		
C47 ,48		CF92FV1H103J	MF	0.010UF	J	E	
C49 ,50		CF92FV1H103J	MF	0.010UF	J		
C51 ,52		CF92FV1H823J	MF	0.082UF	J		
C53 ,54		CE04KW1C100M	ELECTRO	10UF	16WV	MX	
C55 ,56		CE04KW1H2R2M	ELECTRO	2.2UF	50WV		
C57 ,58		CE04KW1C470M	ELECTRO	47UF	16WV		
C59 ,60		CK45FB1H471K	CERAMIC	470PF	K		
C61 ,62		CC45FSL1H101J	CERAMIC	100PF	J		
C63 -66		CF92FV1H473J	MF	0.047UF	J		
C67 -70		CF92FV1H103J	MF	0.010UF	J	E	
C71		CE04KW1H470M	ELECTRO	47UF	50WV		
C72		CE04KW1H221M	ELECTRO	220UF	50WV		

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参照番号	位 置	新	部品番号	部品名 / 規 格			仕 向	備考
C73 -78			CF92FV1H104J	MF	0.10UF	J		
C81			CF92FV1H102J	MF	1000PF	J	MX	
C82			CE04KW1C100M	ELECTRO	10UF	16WV	MX	
C83			CC45FSL1H221J	CERAMIC	220PF	J	MX	
C84			CF92FV1H473J	MF	0.047UF	J	MX	
C86			CF92FV1H472J	MF	4700PF	J	MX	
C90 , 91	*		C90-1966-05	ELECTRO	4700UF	42WV		
C93 , 94			CF92FV1H104J	MF	0.10UF	J		
C95 -97			CE04KW1C101M	ELECTRO	100UF	16WV		
C98 , 99			CF92FV1H104J	MF	0.10UF	J		
C101, 102			CC45FSL1H121J	CERAMIC	120PF	J		
C103-106			CF92FV1H274J	MF	0.27UF	J		
C107			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C108			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C109			CE04KW1A101M	ELECTRO	100UF	10WV		
C110			CE04KW1C470M	ELECTRO	47UF	16WV		
C111			CE04KW1C101M	ELECTRO	100UF	16WV		
C112			CE04KW1H2R2M	ELECTRO	2.2UF	50WV		
C113, 114			CC45FSL1H101J	CERAMIC	100PF	J		
C115			C90-3253-05	ELECTRO	1UF	50WV		
C116			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C117			C91-1439-05	FILM	0.01UF	250VAC		
C118, 119			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C120			CE04KW1C101M	ELECTRO	100UF	16WV		
C121, 122			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C131, 132			CC45FSL1H121J	CERAMIC	120PF	J	E	
C133			CE04KW1V330M	ELECTRO	33UF	35WV	E	
C135, 136			CF92FV1H102J	MF	1000PF	J	MX	
C138, 139			CF92FV1H104J	MF	0.10UF	J		
C140, 141			C91-0769-05	CERAMIC	0.01UF	K		
C142			CF92FV1H104J	MF	0.10UF	J		
C230			CE04KW1E101M	ELECTRO	100UF	25WV		
C231, 232			CE04KW1V470M	ELECTRO	47UF	35WV		
C233, 234			CE04KW1V100M	ELECTRO	10UF	35WV		
C235			CE04KW1E471M	ELECTRO	470UF	25WV		
C236			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C237			C90-1827-05	BACKUP	0.047F	5.5WV		
C238	*		C90-3239-05	ELECTRO	100UF	25WV		
C243, 244	*		C90-3253-05	ELECTRO	1UF	50WV		
C245, 246	*		C90-3237-05	ELECTRO	47UF	25WV		
J1	2D		E08-1508-05	RECTANGULAR RECEPTACLE(RED)				
J2	2D		E58-0001-05	RECTANGULAR RECEPTACLE(GREEN)				
J3	2C		E70-0008-05	LOCK TERMINAL BOARD(F. SPEAKERS)				
J4	2D		E63-0018-05	PHONO JACK(S.W., SURROUND SP.)				
J5	2B		E11-0220-05	MINIATURE PHONE JACK(MIC)			MX	
625	1B, 1C		F20-1284-05	INSULATING BOARD				
△ F1			F05-4025-05	FUSE (SEMKO)	(250V T4A)		M	
△ F2			F05-4028-05	FUSE (UL)	(125V 4A)		KP	
△ F2			F06-2021-05	FUSE (SEMKO)	(250V T2A)		MXTE	
△ F3 , 4			F05-4025-05	FUSE (SEMKO)	(250V T4A)		MXTE	
△ F5			F04-2025-05	FUSE (UL)	(250V 2A)		KP	
△ F5			F06-2021-05	FUSE (SEMKO)	(250V T2A)		MXTE	
△ F6			F06-2021-05	FUSE (SEMKO)	(250V T2A)		MXTE	
△ F6			F06-2525-05	FUSE (UL)	(250V 2.5A)		KP	
△ F7			F04-2025-05	FUSE (UL)	(250V 2A)		KP	

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△ F7			F06-2021-05	FUSE (SEMKO) (250V T2A)	MXTE	
CN6 ,7			J13-0075-05	FUSE CLIP	KPXTE	
CN8 ,9			J13-0075-05	FUSE CLIP	M	
CN10-19			J13-0075-05	FUSE CLIP		
△ L1 -4			L39-0085-05	PHASE COMPENSATION COIL		
△ T1	2C		L07-0332-05	POWER TRANSFORMER	KP	
△ T1	2C		L07-0333-05	POWER TRANSFORMER	XT	
△ T1	2C		L07-0334-05	POWER TRANSFORMER	E	
△ T1	2C		L07-0335-05	POWER TRANSFORMER	M	
CP1 ,2			R90-0187-05	MULTI-COMP 0.22X2	K 5W	
R37 ,38			RN14BK2C1471F	RN 1.47K	F 1/6W	
R39 ,40			RD14NB2E151J	RD 150	J 1/4W	
R41 ,42			RD14NB2E222J	RD 2.2K	J 1/4W	
R43 ,44			RD14NB2E181J	RD 180	J 1/4W	
R45 ,46			RD14NB2E151J	RD 150	J 1/4W	
R55 ,56			RN14BK2C1003F	RN 100K	F 1/6W	
R57 -60			RD14NB2E4R7J	RD 4.7	J 1/4W	
R61 ,62			RS14KB3D100J	FL-PROOF RS 10	J 2W	
R63 ,64			RD14NB2E4R7J	RD 4.7	J 1/4W	
R65 ,66			RS14KB3D561J	FL-PROOF RS 560	J 2W	
R85			RD14NB2E221J	RD 220	J 1/4W	
R86			RD14NB2E101J	RD 100	J 1/4W	
R91 ,92			RD14NB2E4R7J	RD 4.7	J 1/4W	
R93 ,94			RS14KB3A100J	FL-PROOF RS 10	J 1W	
R111,112			RS14KB3A330J	FL-PROOF RS 33	J 1W	
R149,150			RS14KB3D181J	FL-PROOF RS 180	J 2W	
R181			R92-0173-05	RC 2.2M	M 1/2W	KP
R187,188			RD14NB2E221J	RD 220	J 1/4W	
R202			RS14KB3D121J	FL-PROOF RS 120	J 2W	
R204			RS14KB3D151J	FL-PROOF RS 150	J 2W	
R225,226			RD14NB2E100J	RD 10	J 1/4W	
△ R229			R92-0513-05	FUSE RESIST 10	G 1/4W	
R231			RS14KB3D390J	FL-PROOF RS 39	J 2W	
R236			RS14KB3D681J	FL-PROOF RS 680	J 2W	
VR1	2C	*	R29-9028-05	POTENTIOMETER(VOLUME CONTROL)		
VR2	2C	*	R10-5043-05	POTENTIOMETER(BALANCE)		
VR3	2C	*	R11-9022-05	POTENTIOMETER(N.B.CIRCUIT)		
VR4	2B	*	R10-5060-05	POTENTIOMETER(MIC MIXING)	MX	
△ K1			S76-0002-05	MAGNETIC RELAY(POWER)		
K2 -4			S76-0005-05	MAGNETIC RELAY(F,P,S)		
S1		*	S79-0006-05	SWITCH ASSY(85°C CUT FAN)		
S2		*	S79-0007-05	SWITCH ASSY(105°C CUT PROTECT)		
D1 -5			HSS104A	DIODE		
D1 -5			1SS131	DIODE		
D6			HZS4.7N(B)	ZENER DIODE		
D6			RD4.7ES(B)	ZENER DIODE		
D7 -9			HSS104A	DIODE		
△ D7 -9			1SS131	DIODE		
△ D10			D5SBA20F03	DIODE		
△ D10			RBV-602LFA	DIODE		
D11			HZS4.7N(B)	ZENER DIODE		
D11			RD4.7ES(B)	ZENER DIODE		
D12			HSS104A	DIODE		

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D12			1SS131	DIODE		
D13 , 14			HZS5.6N(B2)	ZENER DIODE		
D13 , 14			RD5.6ES(B2)	ZENER DIODE		
D15 -17			HSS104A	DIODE		
D15 -17			1SS131	DIODE		
D18			HZS4.7N(B)	ZENER DIODE		
D18			RD4.7ES(B)	ZENER DIODE		
D19			HZS16N(B2)	ZENER DIODE		
D19			RD16ES(B2)	ZENER DIODE		
D20			S5688B	DIODE		
D20			1SR139-100	DIODE		
D22 , 23			HSS104A	DIODE		
D22 , 23			1SS131	DIODE		
D24			HZS6.8N(B2)	ZENER DIODE		
D24			RD6.8ES(B2)	ZENER DIODE		
D25			HZS6.2N(B2)	ZENER DIODE		
D25			RD6.2ES(B2)	ZENER DIODE		
D26			HZS11N(B2)	ZENER DIODE		
D26			RD11ES(B2)	ZENER DIODE		
D27			HZS16N(B2)	ZENER DIODE		
△ D27			RD16ES(B2)	ZENER DIODE		
△ D29 -32			S5688B	DIODE		
△ D29 -32			1SR139-100	DIODE		
D33 -50			HSS104A	DIODE		
D33 -50			1SS131	DIODE		
D51 , 52			HSS104A	DIODE	MX	
D51 , 52			1SS131	DIODE	MX	
D53 -58			HSS104A	DIODE		
D53 -58			1SS131	DIODE		
IC1			NJM4565D-D	IC(OP AMP X2)		
IC2			TA8409S	IC(MOTOR CONTROL)		
IC4			NJM4565D-D	IC(OP AMP X2)		
IC6			PST529C	IC(SYSTEM RESET)		
△ IC7			TA7815S	IC(VOLTAGE REGULATOR/ +15V)		
△ IC7			UPC7815AHF	IC(VOLTAGE REGULATOR/+15V)		
IC9 , 10		*	SI-18752LF	IC(AF POWER AMP/ 30W)		
Q1 , 2			2SC1845(F, E)	TRANSISTOR		
Q3 , 4			2SC2878(B)	TRANSISTOR		
Q5 -8			2SA992(F, E)	TRANSISTOR		
Q9 -12			2SC1845(F, E)	TRANSISTOR		
Q13 , 14			2SA992(F, E)	TRANSISTOR		
Q15 , 16			2SC4137(V, W)	TRANSISTOR		
△ Q17 , 18			2SD2340	TRANSISTOR		
△ Q19 , 20			2SB1531	TRANSISTOR		
Q21 , 22			2SC1845(F, E)	TRANSISTOR		
Q23			2SA1123(R, S)	TRANSISTOR		
Q24 , 25			2SC1845(F, E)	TRANSISTOR		
Q26 -28			2SC2003(L, K)	TRANSISTOR		
Q29			2SC2878(B)	TRANSISTOR		
Q30			2SA1048(Y, GR)	TRANSISTOR		
Q30			2SA1175(F, E)	TRANSISTOR		
Q30			2SA1309A(Q, R)	TRANSISTOR		
Q30			2SA933S(Q, R)	TRANSISTOR		
Q35 , 36			2SC2878(B)	TRANSISTOR		
Q37			2SA1048(Y, GR)	TRANSISTOR		

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Q37			2SA1175(F, E)	TRANSISTOR				
Q37			2SA1309A(Q, R)	TRANSISTOR				
Q37			2SA933S(Q, R)	TRANSISTOR				
Q38			2SC1740S(Q, R)	TRANSISTOR				
Q38			2SC2458(Y, GR)	TRANSISTOR				
Q38			2SC2785(F, E)	TRANSISTOR				
Q38			2SC3311A(Q, R)	TRANSISTOR				
Q40			DTC124ES	DIGITAL TRANSISTOR				
Q40			RN1203	TRANSISTOR				
Q40			UN4212	TRANSISTOR				
Q52			2SC2003(L, K)	TRANSISTOR				
Q53			2SA954(L, K)	TRANSISTOR				
Q60			2SA1534A(R, S)	TRANSISTOR				
Q61			2SD2061(E, F, G)	TRANSISTOR				
Q62			2SC2003(L, K)	TRANSISTOR				
Q63			2SA992(F, E)	TRANSISTOR				
<b>DISPLAY UNIT X14-362: JAPAN MADE X14-364: SINGAPORE MADE</b>								
D201, 202			B30-1291-05	LED				
C1 -4			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C5			CE04KW1C470M	ELECTRO	47UF	16WV		
C6 , 7			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C8			CE04KW1HR47M	ELECTRO	0.47UF	50WV		
C9			CC45FSL1H101J	CERAMIC	100PF	J		
C10			CE04KW1H2R2M	ELECTRO	2.2UF	50WV		
C11			CE04KW1H3R3M	ELECTRO	3.3UF	50WV		
C12			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C13			CQ92FM1H153J	MYLAR	0.015UF	J		
C14 , 15			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C16			CE04KW1V4R7M	ELECTRO	4.7UF	35WV		
C17			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C18			CE04KW1V100M	ELECTRO	10UF	35WV		
C19			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C20			CE04KW1V100M	ELECTRO	10UF	35WV		
C21			C90-3230-05	ELECTRO	100UF	16WV		
C27 , 28			CQ92FM1H153J	MYLAR	0.015UF	J	MX	
C27 , 28			CQ92FM1H223J	MYLAR	0.022UF	J	KP	
C27 , 28			CQ92FM1H392J	MYLAR	3900PF	J	TE	
C29 , 30			C90-3253-05	ELECTRO	1UF	50WV		
C41 , 42			CC45FCH1H220J	CERAMIC	22PF	J		
C43 -45			CK45FB1H471K	CERAMIC	470PF	K		
C46 , 47			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C48			CQ92FM1H273J	MYLAR	0.027UF	J		
C49			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C50			CE04KW1C470M	ELECTRO	47UF	16WV		
C51			CE04KW1H010M	ELECTRO	1.0UF	50WV		
C52			CE04KW1A470M	ELECTRO	47UF	10WV		
C55			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C56			CC45FSL1H220J	CERAMIC	22PF	J		
C62 -64			C90-3253-05	ELECTRO	1UF	50WV		
C65			C90-3249-05	ELECTRO	0.22UF	50WV		
C66			C90-3244-05	ELECTRO	10UF	35WV		
C67 , 68			CC45FSL1H101J	CERAMIC	100PF	J	KPMX	
C67 , 68			CC45FSL1H271J	CERAMIC	270PF	J	TE	

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C69			CE04KW1V100M	ELECTRO	10UF	35WV		
C70			CC45FSL1H561J	CERAMIC	560PF	J		
C71			CQ92FM1H103J	MYLAR	0.010UF	J		
C106			CE04KW1C470M	ELECTRO	47UF	16WV		
C107			CK45FF1H223Z	CERAMIC	0.022UF	Z	KPMX	
C107,108			CK45FF1H223Z	CERAMIC	0.022UF	Z	TE	
C109,110			C91-0085-05	CERAMIC	0.022UF	N	TE	
C111-114			CK45FF1H223Z	CERAMIC	0.022UF	Z	TE	
C135,136			CQ92FM1H682J	MYLAR	6800PF	J	M	
C170			CC45FSL1H101J	CERAMIC	100PF	J	TE	
C171			CC45FSL1H470J	CERAMIC	47PF	J	TE	
C201			CC45FCH1H330J	CERAMIC	33PF	J		
C202			CC45FCH1H270J	CERAMIC	27PF	J		
C203			CE04DW1A101M	ELECTRO	100UF	10WV		
C204,205			C91-0769-05	CERAMIC	0.01UF	K		
C206			C90-3240-05	ELECTRO	2.2UF	35WV		
C209			C90-3253-05	ELECTRO	1UF	50WV		
C210-214			C91-0769-05	CERAMIC	0.01UF	K		
C215			C90-3210-05	ELECTRO	22UF	6.3WV		
J1	1D		E20-0321-05	LOCK TERMINAL BOARD(ANTENNA)			TE	
J1	1D		E20-0476-05	LOCK TERMINAL BOARD(ANTENNA)			KPMX	
J3	2B		E11-0234-05	PHONE JACK (PHONES)				
CF1 ,2			L72-0531-05	CERAMIC FILTER			KPMX	
CF1 ,2			L72-0536-05	CERAMIC FILTER			TE	
CF3			L72-0096-05	CERAMIC FILTER				
L1			L30-0488-05	AM IFT				
L2			L30-0439-25	FM IFT<DISCRIMINATOR>			KP	
L2			L30-0494-05	FM IFT<DISCRIMINATOR>			MXTE	
L3			L40-1021-14	SMALL FIXED INDUCTOR(1.0mH,K)			TE	
L5			L79-0125-05	LC FILTER			TE	
L6 ,7			L79-0790-05	LC FILTER			TE	
L8			L40-1091-17	SMALL FIXED INDUCTOR(1UH)				
L104			L39-0189-05	COMBINATION COIL			KPMX	
L104			L39-0195-05	COMBINATION COIL			TE	
L105			L39-0192-05	COMBINATION COIL			TE	
L106			L40-1091-17	SMALL FIXED INDUCTOR(1UH)				
X1			L77-1122-05	CRYSTAL RESONATOR(7.2MHz)				
X2			L78-0208-05	RESONATOR (456kHz)				
X201			L77-1176-05	CRYSTAL RESONATOR(4.194304MHz)				
CP201			R90-0855-05	MULTI-COMP	100KX5	J		
CP202			R90-0482-05	MULTI-COMP	100KX4	J 1/6W		
CP203			R90-0824-05	MULTI-COMP	4.7KX4			
R21			RD14NB2E680J	RD	68	J 1/4W		
R37			RD14GB2E101J	FL-PROOF RD	100	J 1/4W		
R53			RS14KB3D101J	FL-PROOF RS	100	J 2W		
R143			RS14KB3D121J	FL-PROOF RS	120	J 2W		
VR1			R12-3687-05	TRIMMING POT.(33K)<FM T-LEVEL>				
VR3			R12-3685-05	TRIMMING POT.(10K)<AM T-LEVEL>				
VR5			R12-6663-05	TRIMMING POT.(330K)<SEPA.>				
S1 -36	3B		S40-1064-05	TACT SWITCH(1-0 AI TIMER etc.)				
S37	1D		S31-3010-05	SLIDE SWITCH(110-120/220-240V)			M	
S101	2D		S31-2132-05	SLIDE SWITCH(DE-EM.,CH.SPACE)			M	
D1			HSS104	DIODE			TE	

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D1			1SS133	DIODE	TE	
D3			HZS5.1N(B2)	ZENER DIODE		
D3			RD5.1ES(B2)	ZENER DIODE		
D109-116			HSS104	DIODE	TE	
D109-116			1SS133	DIODE	TE	
D111,112			HSS104	DIODE	KPMX	
D111,112			1SS133	DIODE	KPMX	
D120			HZS3.3N(B2)	ZENER DIODE		
D120			RD3.3ES(B2)	ZENER DIODE		
D122			HSS104	DIODE	TE	
D122			1SS133	DIODE	TE	
D211,212			HSS104	DIODE		
D211,212			1SS133	DIODE		
D213			HSS104	DIODE	XTE	
D213			1SS133	DIODE	XTE	
D214			HSS104	DIODE	MXTE	
D214			1SS133	DIODE	MXTE	
D215			HSS104	DIODE	TE	
D215			1SS133	DIODE	TE	
D216			HSS104	DIODE	M	
D216			1SS133	DIODE		
D217-227			HSS104	DIODE		
D217-227			1SS133	DIODE		
D231-234			HSS104	DIODE		
D231-234			1SS133	DIODE		
ED201	3B		FIP11AM7R	INDICATOR TUBE		
IC1			LA1265	IC(FM/AM TUNER)		
IC2			LA3401	IC(FM MPX)		
IC3			LM7001	IC(PLL FREQUENCY SYNTHESIZER)		
IC201	*		CXP50116-397Q	IC(4BIT MICROPROCESSOR)		
IC201	*		CXP50116-397QA	IC(4BIT MICROPROCESSOR)		
IC202			CX-7991	IC(SERIAL/PARALLEL CONVERTER)		
Q1			2SC1923(R,0)	TRANSISTOR		
Q2			2SC1845(F,E)	TRANSISTOR		
Q3			2SC1740S(Q,R)	TRANSISTOR		
Q3			2SC2458(Y,GR)	TRANSISTOR		
Q3			2SC2785(F,E)	TRANSISTOR		
Q3			2SC3311A(Q,R)	TRANSISTOR		
Q4			2SC1740S(Q,R)	TRANSISTOR	TE	
Q4			2SC2458(Y,GR)	TRANSISTOR	TE	
Q4			2SC2785(F,E)	TRANSISTOR	TE	
Q4			2SC3311A(Q,R)	TRANSISTOR	TE	
Q5			2SK163(L,M)	FET	TE	
Q5			2SK364(GR,BL)	FET	TE	
Q7			2SC2458(Y,GR)	TRANSISTOR	TE	
Q7			2SC3311A(Q,R)	TRANSISTOR		
Q102			2SA1048(Y,GR)	TRANSISTOR		
Q102			2SA1175(F,E)	TRANSISTOR		
Q102			2SA1309A(Q,R)	TRANSISTOR		
Q102			2SA933S(Q,R)	TRANSISTOR		
Q103			2SA1048(Y,GR)	TRANSISTOR	TE	
Q103			2SA1175(F,E)	TRANSISTOR	TE	
Q103			2SA1309A(Q,R)	TRANSISTOR	TE	
Q103			2SA933S(Q,R)	TRANSISTOR	TE	
Q104			2SA1048(Y,GR)	TRANSISTOR	TE	

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## PARTS LIST/SPECIFICATIONS

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Q104			2SA1175(F, E)	TRANSISTOR		
Q104			2SA1309A(Q, R)	TRANSISTOR		
Q104			2SA933S(Q, R)	TRANSISTOR		
Q105, 106			2SC1740S(Q, R)	TRANSISTOR	TE	
Q105, 106			2SC2458(Y, GR)	TRANSISTOR	TE	
Q105, 106			2SC2785(F, E)	TRANSISTOR	TE	
Q105, 106			2SC3311A(Q, R)	TRANSISTOR	TE	
Q107, 108			2SC1740S(Q, R)	TRANSISTOR	M	
Q107, 108			2SC2458(Y, GR)	TRANSISTOR	M	
Q107, 108			2SC2785(F, E)	TRANSISTOR	M	
Q107, 108			2SC3311A(Q, R)	TRANSISTOR	M	
Q109, 110			2SD1302(S, T)	TRANSISTOR		
Q111			2SA1048(Y, GR)	TRANSISTOR		
Q111			2SA1175(F, E)	TRANSISTOR		
Q111			2SA1309A(Q, R)	TRANSISTOR		
Q111		*	2SA933S(Q, R)	TRANSISTOR		
Q201, 202		*	2SC4038(Q, R)	TRANSISTOR		
Q203		*	2SA1561(Q, R)	TRANSISTOR	M	
A1	3B		W02-1046-05	ELECTRIC CIRCUIT MODULE		
DT1	2D		W02-1041-15	FM FRONT-END ASSY	TE	
DT1	2D		W02-1042-15	FM FRONT-END ASSY	KPMX	

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## Specifications

## Receiver unit (A-A7)

## Amplifier section

## Rated power output

## For U.S.A. and Canada

30 watts per channel minimum RMS, both channels driven, at 4 Ω from 40 Hz to 20,000 Hz with no more than 0.09 % total harmonic distortion

## Presence

1 kHz at 8 Ω ..... 18 W + 18 W

## For other countries

(EIAJ 4 Ω) ..... 45 W + 45 W  
 (IHF'66) From 40 Hz to 20 kHz, 0.09 % T.H.D.  
 at 4 Ω ..... 35 W + 35 W  
 (IEC / NF) From 63 Hz to 12,500 Hz, 0.7 % T.H.D.  
 at 4 Ω ..... 35 W + 35 W

## Presence

1 kHz at 8 Ω ..... 25 W + 25 W (EIAJ)

## Total harmonic distortion

..... 0.09 % (40 Hz ~ 20 kHz, 1 / 2 rated power, 4 Ω)  
 ..... 0.06 % (1 kHz, 1 / 2 rated power, 4 Ω)

## Signal to noise ratio

LD / AUX, VIDEO, MD / DAT ..... 100 dB (IHF'66) / 80 dB (IHF'78)

## Input sensitivity / Impedance

LD / AUX, VIDEO, MD / DAT ..... 150 mV / 47 kΩ  
 MIC ..... 1.2 mV / 47 kΩ

(Except for U.S.A and Canada)

N.B. circuit (-30 dB Volume level) (Max) ..... + 15 dB  
 (at 60 Hz)

## Output level / Impedance

SUPER WOOFER OUT ..... 1.5 V / 3.6 kΩ

## VIDEO section

## Input level impedance

VIDEO (composite) ..... 1 Vp-p / 75 Ω

Input (LD / AUX, VIDEO IN)

## Output level impedance

VIDEO (composite) ..... 1 Vp-p / 75 Ω

Output (MONITOR, VIDEO OUT)

## FM Tuner section

Tuning frequency range ..... 87.5 MHz ~ 108 MHz

Sensitivity (MONO at 75 Ω) ..... 1.2 μV / 12.8 dBf

## Total harmonic distortion (at 1 kHz)

MONO ..... 0.5 % (65 dBf input)

STEREO ..... 0.6 % (65 dBf input)

## Signal to noise ratio at 1 kHz

MONO ..... 80 dB (85 dBf input)

STEREO ..... 74 dB (85 dBf input)

Selectivity (± 400 kHz) ..... 50 dB

## Stereo separation

1 kHz ..... 40 dB

Frequency response ..... 30 Hz ~ 15 kHz, + 0.5 dB, - 3 dB

## AM Tuner section

## Tuning frequency range

9 kHz step ..... 531 kHz ~ 1,602 kHz

10 kHz step ..... 530 kHz ~ 1,610 kHz

or 530 kHz ~ 1,700 kHz

(for U.S.A. and Canada)

Usable sensitivity ..... 10 μV / (500 μV / m)

## Signal to noise ratio

(at 30 % mod. 1 mV input) ..... 48 dB

## [General]

Power consumption ..... 170 W

Dimensions ..... W: 270 mm (10-5 / 8")

H: 120 mm (4-3 / 4")

D: 332 mm (13-1 / 16")

Weight (net) ..... 6.5 kg (14.3 lb)

# SPECIFICATIONS

## Receiver unit (A-A7L)

### Amplifier section

#### Rated power output

(IEC / NF) From 63 Hz to 12,500 Hz, 0.7 % T.H.D.	
at 4 Ω	35 W + 35 W
(DIN) 1 kHz at 4 Ω	35 W + 35 W

#### Presence

1 kHz at 8 Ω	25 W + 25 W
--------------	-------------

#### Total harmonic distortion

..... 0.09 % (40 Hz ~ 20 kHz, 1 / 2 rated power, 4 Ω)	
..... 0.06 % (1 kHz, 1 / 2 rated power, 4 Ω)	

#### Signal to noise ratio

LD / AUX, VIDEO, MD / DAT	
..... 100 dB (IHF'66) / 80 dB (IHF'78)	

#### Input sensitivity / Impedance

LD / AUX, VIDEO, MD / DAT	150 mV / 47 kΩ
N.B. circuit (- 30 dB Volume level) (Max)	..... + 15 dB (at 60 Hz)

#### Output level / Impedance

SUPER WOOFER OUT	1.5 V / 3.6 kΩ
------------------	----------------

### VIDEO section

#### Input level impedance

VIDEO (composite)	1 Vp-p / 75 Ω
Input (LD / AUX, VIDEO IN)	

#### Output level impedance

VIDEO (composite)	1 Vp-p / 75 Ω
Output (MONITOR, VIDEO OUT)	

### FM Tuner section

#### Tuning frequency range

#### Sensitivity (DIN at 75 Ω)

MONO	0.7 μV / 8.2 dBf
------	------------------

#### Total harmonic distortion (DIN at 1 kHz)

MONO	0.6 % (65.2 dBf input)
------	------------------------

STEREO	0.8 % (65.2 dBf input)
--------	------------------------

#### Signal to noise ratio (DIN weighted at 1 kHz)

MONO	70 dB (65.2 dBf input)
------	------------------------

STEREO	64 dB (65.2 dBf input)
--------	------------------------

#### Selectivity (DIN ± 300 kHz)

#### Stereo separation (DIN)

1 kHz	40 dB
-------	-------

#### Frequency response

..... 30 Hz ~ 15 kHz, + 0.5 dB, - 3 dB	
--	--

### MW Tuner section

#### Tuning frequency range

#### Usable sensitivity

#### Signal to noise ratio

(at 30 % mod. 1 mV input)	48 dB
---------------------------	-------

### LW Tuner section

#### Tuning frequency range

#### Usable sensitivity

#### Signal to noise ratio

(at 30 % mod. 1 mV input)	45 dB
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### [General]

#### Power consumption

#### Dimensions

W: 270 mm (10-5 / 8")	
H: 120 mm (4-3 / 4")	
D: 332 mm (13-1 / 16")	

#### Weight (net)

..... 6.5 kg (14.3 lb)	
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**Note:**  
Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the U.S.A. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

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